COURDINATION IN RURAL ELECTRIFICATION PROGRAMME

bу

Mohit Bhattacharya

Indian Institute of Public Administration
New Delhi - 110002

This report has grown out of a research project assigned to us by the Rural Electrification Corporation. The REC has been financing electrification projects to help augment agricultural and industrial production. The projects are, therefore, not merely for extending electrification for its own sake. The way they create conditions for idevelopment is of crucial importance. At the state level, the Electricity Boards are the recipients of REC funds. They have to prepare projects following the REC quidelines and to make sure that the projects lead to area development. Taking electricity of an area is a technical job which the Electricity Boards are used to doing as part of their normal business. But to see that area development takes place through electricity extension is beyond the competence of the Boards. This needs an understanding of the economic base of an area, its institutional situation and infra-structural endowment. The process involved in area development is much more complex than mere electricity extension. As the financing agency, the REC has, therefore, to instruct the Electricity Boards in such a way that the main mission of rural electrification is clearly comprehended by the Boards. In its turn, an Electricity Board has to act according to the guidelines of the REC and take a number of organizations and institutions into confidence. As the nodal agency, it has to evolve a culture of inter-organizational interactions that would result in area development.

The present study revolves round this problem of area development through electrification. Two REC scheme-sites in Rajasthan -- one at Kekri (Ajmer District) and another at Weir (Bharatpur District) ---constitute the development scenario. The objective has been to trace the processes of scheme formulation and implementation and to identify critical factors that trigger area development through electrification. The case studies reported here provide an understanding of REC's role in relation to the State Electricity Board, the Board's role in project planning and implementation, and the inter-organizational relationships that are critical for project success. Data and evidence for the study have been collected from secondary sources like REC office records and reports and schemes from different offices of Rajasthan government, primary field source through visits, interviews and discussions at different levels, and file studies in a number of organizations. Consumers' responses were tapped with the help of a structured questionnaire and through free discussions with the farmers.

The study is in two parts. Part I deals with the Kekri project, while Part II covers Weir project and the generalizations distilled from both projects and conclusions and recommendations.

More case studies of a clinical nature are called for to have a better understanding of the processes of project planning and implementation. We are grateful to the REC authorities for financing the research.

Thanks are also due to many REC and State government officials at different levels without whose ready cooperation the study would not have become possible.

For field survey, credit goes to Taj Singh
Yadav/for elegant typing thanks are due to B.K.Anand. /and

Mohit Bhattacharya

New Delhi, 1979.

CONTENTS

Chapters	Pages
Part I: Project Profile	
Preface	(i)
I. Introduction	1
II. Kakri : The Setting	12
III. Kekri: The REC Scheme	30
IV. Kekri : Analysis of Administrative Confusion	37
Part II : Project Profile	
V. Weir: The Setting	52
VI. Weir: The REC Scheme and its Implementation	61
Part III : Analysis and Cond	clusions
VII. Consumers Responses	74
VIII. Coordination in Electrification	02
IX. Summary of Conclusions and Recommendations	112
Appendices: Case Studies on Corruption	129

Chapter I

INTRODUCTION

Rural development marks a planned effort to restructure the rural society as part of a larger national development strategy. In pursuing rural development, formulation of right kinds of policies is as important as efficient management of numerous projects on the ground. Considerable attention has been paid to the shifting policy scenario in rural development. But the more mundane job of project management has remained a relatively neglected field. The criticality of project management in actually delivering the 'goods' needs hardly any emphasis, and it is this aspect of rural development that constitutes the focus of the present study.

The research reported here revolves round two development projects in Rajasthan - one in Kekri Panchayat

Samiti area in Ajmer District and another in Weir Panchayat

Samiti area in Bharatpur District. These are electrification projects financed by the Rural Electrification Corporation which is a Government of India undertaking. In pursuance of the policy of the REC, its projects are sanctioned not merely to provide financial assistance to the State Electricity Board for the extension of its rural distribution system. The REC, in addition to ensuring observance of

prescribed norms of economic viability, has to make sure that the projects are co-ordinated with the various other local development programmes in order to help increase agricultural and industrial production in a designated project area.

While electrification is the job of the State

Electricity Board, agricultural and industrial development
is beyond its competence. Such development involves a

much more complicated process. The 'administrative factor'
or what is usually referred to as the problem of integration
or co-ordination of numerous governmental agencies is no

doubt very important in this context. But one has to search
for wider explanations in local geography, social structure
and infrastructural endowments. Politics in the sense of
who gets what, when and how is equally important.

Another important aspect is the *administrative behaviour*, signifying the motivation of administrators and their commitment to a development activity in their charge.

^{1.} In recommending the establishment of the REC, the All-India Rural Credit Review Committee (1969) came to the conclusion that a massive programme of rural electrification for ground water exploitation was essential for further development of agriculture in India.

'Development' is a multi-causal phenomenon.

While attaching importance (a priori) to the administrative factor, one has at the same time to approach the problem rather heuristically seeking to identify the chief development-generating factors among a host of interacting forces.

In conducting the present research, we have followed this method of enquiry.

Dutput Indicator: Development is an on-going process and it is futile to think of an end state in terms of certain features or indicators. The kinds of projects through which REC has been attempting to stimulate rural development produce quantifiable output. The central concern of these projects is to increase agricultural productivity by energisation of tubewells. To a limited extent, domestic and strest lighting and industrial productivity form part of the project target. Project success is accordingly measured in terms of the degree of target fulfilment. When REC agrees to finance a project, it looks beyond mere agricultural connections into the larger objective of agricultural productivity. Its own internal project monitoring and evaluation are, however, based more on "connections" data than on "productivity" data.* Since its direct client is the State

^{*} Admittedly, REC is formally concerned with productivity also which is reflected in project designing.

Electricity Board, it is easier to get the former than the latter. At the moment, REC does not seem to have any way of understanding the <u>real impact</u> of its projects.

Connections or target fulfilment can be considered the "intermediate output", whereas "actual agricultural productivity along with allied results" can be called the final output. Increase in irrigated land and water quantity, growth in farm output and farmers' income, repaying schedule of loan, rise in local bank deposit are some of the crucial indices that could be adopted to measure final output.

In the present study, we have looked into both "connections" and "productivity" as output indicators.

Problem of Co-ordination: Our terms of reference, as defined by REC, lay heavy emphasis on 'co-ordination' as a major problem standing in the way of successful project management. As earlier stated, we did look into the problem of co-ordination and at the same time searched for other important factors affecting efficient management of the projects.

In agricultural development projects, there are interdependencies in two directions: vertical and horizontal. Certain decisions such as funding, planning, input supply, choice of locations etc. are taken at higher levels. At the operational level where planning is actually activated,

certain other decisions have to be taken in a comity of agencies placed at the same level. Thus, a combination of vertical and horizontal linkages needs to be worked out to successfully plan and implement projects.

As it has been observed: "In agricultural planning, two types of co-ordination are called for: vertical co-ordination or linking the micro and macro models, and horizontal co-ordination among the related submodels".

"In general, there are two contrasting types of macro models: those models which are built from the 'bottom up' and those which are built from the 'top down'. The former describes the micro behaviour of farms and then aggregates to the macro level, while the latter starts at the macro-economic level. However, these two types are unlikely to be independent of each other. For an effective vertical co-ordination in multi-level agricultural planning, some method of horizontal co-ordination is essentially required between the model builders and relevant units of decision-making especially at the central and regional levels". 2

^{2.} Dong Hi Kim, "Co-ordination in Models representing different decision-making levels in agriculture", in <u>Decision-Making</u> and <u>Agriculture</u>, papers and reports, Sixteenth International Conference of Agricultural Economists, held at Nairobi, Kenya, 26th July - 4th August 1976, University of Nebraska Press, 1977.

At the field level, there are different tiers of administration such as the division or circle, the district, the subdivision and the block. Vertical co-ordination would mean working together of these tiers in so far as any one of these has relevance for a particular project. Depending on the location of operational area of a project, the different agencies at that location having a bearing on the project have to come together in support of the common cause.

Organizational formation at higher and field levels has historically evolved along departmental lines in response to insular departmental activities. The culture of departmentalism is deeply rooted in administration which is a legacy of the pre-planning era. In recent times, fairly autonomous special programme organizations have been set up at the field level partly to circumvent this problem of departmental parochialism. When a number of special programmes are launched (e.g. SFDA, DPAP), each with its captive special organization, field administration tends to be divided up into a series of insular departments and special programme organizations. The organizational map is further complicated by the three-tier panchayati raj set-up. New projects having linkages with a number of departments and special programme organizations have to reckon with the complexity of the field administrative

situation. If project success would be dependent on the joint endeavour of a number of agencies, the inter-organizational relationships need to be deliberately worked out both at the planning and implementation stages. Since there is no perceived 'common cause' in normal times for the desparate agencies, special efforts are needed to inculcate the value of concerted move among the relevant participating agencies in a specific project.

REC Directive: Acknowledging the crucial importance of coordination in project management, REC has been urging upon
the state governments and particularly the electricity boards
to realise the functional necessity of co-ordination
and create conditions for such co-ordination. The spirit of
REC's communication is best reflected in the REC circular
dated August 14th, 1970.

A rural electrification project as conceived by REC represents a plan for extension of the supply of electricity to rural users within a defined compact area in such a manner that extension of electricity along with other investments and inputs results in increased agricultural and industrial production and gives reasonable returns on the investment in the area. Thus in achieving the various loads targeted under these projects, apart from the SEB, which has an important role to play, the various other

developmental agencies such as agriculture and industries departments, and credit agencies etc., have also an equally important supporting role to play. The various developmental programmes need to be syncronised so as to achieve the object of overall development of the area covered by the project.

Electricity being both a development infrastructure and an economic input in production and the thrust of REC projects being presently on pumpsets energisation, the developmental potential is more importantly to be adjudged in the light of the availability or otherwise of adequate ground or surface water. The other likely investments such as those envisaged under SFDA, MFAL, etc. would be an additional factor since these investments would supplement and help to achieve the targets of each of these programmes. Similarly credit institutions, both co-operative and commercial banks, take an important role since provision of credit to the farmers both for long term capital investment on pumpsets and short term credit for his current and recurring farm operations, is a sine qua non for the success of any programme of agricultural development. In particular the Land Development Bank, the Lead Bank in the commercial banking sector, the agricultural development branches of the SBI etc. are of vital importance. Likewise, the

avail bility of improved ariety of seeds, fertilisers and pesticides, etc. have also to be facilitated, and, therefore, the agencies for the distribution of these inputs play an important supporting role.

To facilitate a co-ordinated approach by the various agencies and departments, REC has from the very start insisted on a suitable institutional arrangement for co-ordination at the state, district and project levels. To this end, REC has impressed upon the Electricity Boards and the State Governments, the need to constitute both state level and district level co-ordination committees. The quidelines issued by REC in this regard had indicated to the State Electricity Boards that steps should be taken to constitute co-ordination committees both at the district and state levels with a view to integrating the programmes envisaged under REC financed schemes with other area development programmes. At the district level, there should be a separate district co-ordination committee on rural electrification than the general district level co-ordination committee or district planning committee as usually formed. This district committee on rural electrification should be a more compact smaller body consisting of only the representatives of the concerned State departments and the representatives of the concerned financing institutions. Besides, suitable arrangements for co-ordination are necessary at the project level also. It is at this point that it becomes necessary that

other development agencies like district (or sub-divisional)
agricultural and industries officers as well as others could
be closely associated both with the formulation and implementation of these schemes. Thus, both in fixing targets (load
ostimates) and ensuring that these are achieved, the departments concerned could make a significant contribution.

It seems REC has looked at 'co-ordination' as an intermittent organizational condition. Its diagnosis of the problem is above board. To expect that occasional committee meetings at state and district levels would solve the problem looks, however, a very simplistic reaction to a complex organizational situation. More organic changes are needed to facilitate interorganizational cooperation and collaboration at different stages of the development process.

One of the major issues to which the present research addresses itself is to make a clinical examination of the web of organisations involved in project management, and suggest ways of organizational orchestration in support of project operations.

Methodologically, the technique of work and the work processes subsumed in area electrification project have been studied followed by a survey of organizations taking part at different stages of the work processes. It has been hypothesised that the need for co-ordination should be reflected in

the interdependence along the course of activities involved in a specific task. Hence the objective test of co-ordination would lie in a thorough analysis of the work processes.

In a client-oriented task (e.g. energisation of farm tubewells), the target group's perception of administrative situation is very significant. This is an aspect which is often ignored by organizational analysis. We conducted a sample survey of the beneficiaries with a view to finding out their reactions to field level administrative organizations and operations. Such a survey is expected to throw up organizational problems encountered by the target group including implicit suggestions for desirable organizational changes.

The analysis of work processes coupled with the inventory of organizations and the sample survey of beneficiaries are expected to yield sufficient data and evidence to explain the present organizational situation, identify dysfunctionalities and to suggest changes to improve project performance.

In presenting the report, the two schemes are discussed separately in terms of their setting and background information, the project profiles and performances, and analysis of project management. The concluding section attempts to integrate the earlier discussions and seeks to distill a set of broad generalizations on project management.

CHAPTER II

KEKRI : THE SETTING

Of the two R.E.C. schemes under study, one was located in Kekri Panchayat Samiti area of Ajmer District, and the other in Weir Panchayat Samiti area of Bharatpur District. In this chapter, a brief account is presented of the physiographic and socio-economic characteristics of Kekri P.S.

Kekri Scheme Area

Kekri town is 80 Km away from the District Headquarters town of Ajmer, and is connected with Jaipur, Kota, Bewar and Ajmer by road links. There is no railway line passing through the P.S. area. The offices of the S.D.M., Tehsil, Munsif and B.D.O. are located in Kekri town. Because of its agricultural hinterland, an A class Krish Upaj Mandi has been set up in the town. Of the important financial institutions, Kekri Land Development Bank and the Central Cooperative Bank deserve special mention. Other banking institutions include the Bank of Rajasthan and State Bank of Bikaner and Jaipur and, for the last couple of years, the Bank of Baroda and the agricultural development branch of the State Bank of India have been operating in the area. The Bank of Baroda is the lead bank for the district. is also a big wool business centre as sheep farming is commonly undertaken in the area.

Kekri P.S. covers an area of slightly more than 350 sq. km. in the south-eastern part of Ajmer District. It consists of 97 villages with a population of about 70,000 (1971 census). Agriculture is the main occupation in the area which absorbs nearly 77% of the working population. Important crops grown are makki, cotton, jowar, bajra, til, groundnut and chilly in the kharif season; and wheat, barley, gram, bajra, gochani, bejhar, pulses and oilseed in the rabi season. The cropping profile of the tehsil is shown in Table 1.

In the cropping pattern of the tehsil, the emphasis is by far on food-grains which is clear from Table 1. Total cropped area during kharif season was 70701 hect., out of which 52614 hect. or 75% was under foodgrain crops. Of this again, 51194 hect. or 72.3% was under cereals and the remaining 1420 hect. or 2% was under pulses. Among the foodgrains crops, jowar is the main crop which covers 32616 hect. i.e. more than half the area under foodgrain crops. Jowar alone occupied 64% of the total area under cereals and 46% of the total area under cereals and 46% of the total area under kharif season.

Next comes makki (maize) which occupied nearly 22% of the total cultivated area. Both maize and jowar occupied 48055 hect. out of 51195 hect. under cereal crops. The remaining 6% area was occupied by bajra crop. Area under

Table 1

Kekri Tehsil : Area under principal crops,
1972 (area in hectares)

	Crops	Area under cultivation		Total Area under cul-	% to total area under
		Irrgt.;	Unirrgt.	tivation	cultivation
. <u>Kharif</u>					
	Makki	97	15,337	15,434	21.8
	Jowar	5	32,616	32,621	46.1
	Bajra	0	3,139	3,139	4.4
	Pulses	1	1,419	1,420	2.0
	Oilseeds	1	9,564	9,565	13.5
	Chilly	156	17	1 7 3	0.2
	Cotton	2,042	1,879	3,921	5.5
	Green Fodder	28	875	903	1.3
	Others	137	3,388	3,525	5.0
-	Total	2,467	68,234	70,701	100.0

pulses was 1420 hect. or 20% of the total cultivated area. Cash crops, namely oilseeds, chilly and cotton, occupied 19.2% of the total area under cultivation. Among these cash crops oilseeds i.e. til and groundnut, occupied 13.5% of the total cultivated area. Cotton occupied 5.5% of the total cultivated area.

Out of the total cultivated area (70701 hect.) during kharif season only 2467 hect. was irrigated. In other words, only a fraction of the total area under cultivation i.e. 3.5%, is irrigated and the remaining 96.5% is unirrigated. Among cash crops, cotton accounts for 83% of the total irrigated area.

In the rabi season also the foodgrain crops are dominant. During rabi 1973, total cultivated area was 47588 hect., out of which 20586 hect. i.e. 43% was irrigated and the rest, 57% was unirrigated. Wheat is the principal rabi crop, occupying slightly more than 40% of the total area under rabi cultivation. Out of total irrigated area in the tehsil during rabi, 26.9% was under wheat crops. Next comes barley which occupied second position among cereals from the point of view of area (7978 hect.) covered by the crops. Another important foodgrain crop is gram, covering 17.5% of the total area.

pulses was 1420 hect. or 20% of the total cultivated area. Cash crops, namely oilseeds, chilly and cotton, occupied 19.2% of the total area under cultivation. Among these cash crops oilseeds i.e. til and groundnut, occupied 13.5% of the total cultivated area. Cotton occupied 5.5% of the total cultivated area.

Out of the total cultivated area (70701 hect.) during kharif season only 2467 hect. was irrigated. In other words, only a fraction of the total area under cultivation i.e. 3.5%, is irrigated and the remaining 96.5% is unirrigated. Among cash crops, cotton accounts for 83% of the total irrigated area.

In the rabi season also the foodgrain crops are dominant. During rabi 1973, total cultivated area was 47588 hect., out of which 20586 hect. i.e. 43% was irrigated and the rest, 57% was unirrigated. Wheat is the principal rabi crop, occupying slightly more than 40% of the total area under rabi cultivation. Out of total irrigated area in the tehsil during rabi, 26.9% was under wheat crops. Next comes barley which occupied second position among cereals from the point of view of area (7978 hect.) covered by the crops. Another important foodgrain crop is gram, covering 17.5% of the total area.

Mixed cropping which means growing of more than one crop at the same time is quite common in rabi. Wheat and barley, when grown together in the same field, would be locally termed bajra. When wheat and gram are grown together, this crop is called gochani; and when barley and gram are grown together, the crop is called bejhar. The areas covered under different mixed cropping are shown in Table 1.

Only about 23% of the total cultivated area in the tehsil is under double or multiple crops. Non-availability of irrigation facilities is responsible for this low percentage of area under multiple cropping. Agriculture in Kekri is mainly rain-fed, but rainfall has been very erratic over the years. The area lies in the semi-arid zone of the state. On the basis of data from 1957 to 1977, the average mean rainfall comes to about 746 mm per year. This does not explain the extreme uncertainty and irregularity of rainfall to which the area is generally subject. The drainage of the area is chiefly controlled by the River Dai in the north and rivers Khari and Banas in the South. All these rivers are ephemeral, flowing from west to east and north-east.

Minor Trrigation

Due to uncertain and inadequate rainfall, agricultural development has suffered over the years in the tehsil.

Exploitation of ground water has naturally attracted the

attention of government. Under the Hydrogeological Reconnaisance Scheme of the Rajasthan Ground Water Board, groundwater survey of Kekri PS was carried out in 1970-71. The survey report indicates that the major area of the block is underlain by hard rocks, and alluvial formations are met with around the bank and course of the rivers Banas, Khari and Dai. Definite zones (A and B) were identified in the survey report where additional number of tubewells could be sunk and dug wells constructed, and existing dugwells could be deepened by boring and blasting. It was pointed out that development activities could be safely undertaken in the designated zones without affecting the water table in the existing wells.

This ground water survey supported by the evidence of actual number of existing wells, formed the technical basis of the Minor Irrigation Scheme for Kekri PS financed by the ARDC with effect from July 1972. For the purposes of the present research it is important to note that the ARDC scheme comes little before the launching of the RFC scheme and provides <u>inter alia</u> for only 500 electric pump sets in the project area. On the basis of ground water data, the MI project selected 66 villages in Kekri PS, 21 villages in Zone A and 45 in Zone B. In 1973, two more villages were included in zone A increasing thereby the total number of villages to 68.

The MT scheme is thus spatially definite. Another important feature is the spacing criterion of the scheme under which the distance between two tubewells and deepened wells should be at least 300 metres. For electric pumpsets, two recommendations were made. Firstly, no loan should be issued for pumpsets until the extension of electrification to the scheme area. Secondly, composite loans for construction and revitalization of wells with pumpsets should be issued to cultivators who would bring under irrigation at least 5 acres of land. Loans for tubewells would be issued to a cultivator or groups of cultivators who would bring under irrigation at least 10 acres of land.

Some discretion was allowed in respect of smaller holdings where, in exceptional cases, better farm management and greater intensity of cultivation might in all probability lead to higher productivity. The fact, however, remains that the MI scheme specified the locations and the prospective beneficiaries who would generally be medium farmers.

The scheme appointed the Land Development Bank as the sole landing agency for the purposes of the scheme, and the commercial banks were virtually banned from the area.

To ensure timely input supply improved seeds, fertilizer and pesticides were to be delivered by the cooperative societies.

MI Scheme Organization

The project office of the MI scheme at Kekri PS deserve special attention in view of its close interaction with electrification work. The Officer in Charge is the Project Officer who receives technical support from one junior engineer (civil or agricultural), one agricultural assistant and one land valuation officer. Since the establishment of the office in July 1972, an intensive publicity campaign has been conducted in close collaboration with the Panchayat Samity and the Block Development Office. The sarpanches and village level workers were briefed on the nature and scope of the project. Another meeting was arranged with the Patwaries under the chairmanship of the Tehsildar, for familiarization purposes.

Then followed the 'meet the farmer' campaign. A series of farmers' meetings was arranged at the village panchayat offices where the nature of the scheme was explained, the procedural technicality in respect of loans was clarified and the patwaries and other revenue personnel were requested to help the farmers in quickly getting their 'Jamabandi' and 'Girdhawari' records.

the technical possibility and financial viability of proposals. Applications for loan are submitted by farmers in the LDB office. After proliminary scrutiny of the supporting documents, the proposal files are forwarded by the LDB office to the MI project office for approval. The MI office examines each proposal mainly from the point of view of spacing criteria and groundwater availability, and financial soundness of the applicant including his land holding status. The rigidity of spacing criterion as fixed by the ARDC often creates difficulty in actual project sanctioning and the MI Office gets the rules sometimes changed by the Special Schemes Organization at Jaipur. 1 ARDC has since been requested to relax the spacing criterion to allow for occasional local adjustments.

There is no direct formal link between the MI Office and the local electricity board office, although in practice the two offices communicate with each other out of functional necessity. The only tenuous link, formally speaking, is the LDB which connects the two offices together. The MI Office, as earlier stated, receives files from the LDB which contain

^{1.} The SSO was set up in 1974 i.e. after the launching of the REC scheme at Kekri.

documentary evidence that the farmer has applied for electricity connections for his pumpset which he is likely to get. There is a lot of formal written communication between the MJ Office and the Electricity Office on specific issues arising out of electrification. Informally, the MI Project Officer and the Assistant Engineer of the electricity office work pretty closely together in view of complementarity of functions.

The MI Scheme was to run for a period of three years from July 1973 to July 1975. Because of tardy progress, it was extended twice and was finally wound up in June 1977.

At the fag end of its career, the MI scheme pondered over the causes of its failure to fulfil the target of electrification. Since this has direct relevance for the REC project, the main reasons identified are listed below:

- The farmers lost interest in electrification due to delay in getting connections and in the face of procedural hurdles.
- 2. The villages falling under the REC electrification scheme generally suffer from lack of sufficient quantity of underground water in the wells and unsuitability of water for irrigation purposes.

- 3. Small land holders do not come together for jointly owning a pump set. Often, they are not prepared to give written consent for a joint proposal. Individually, small farms are not viable and cannot be given loan as per rules.
- 4. When it comes to paying for an extra electricity pole to extend connection, farmers in a cluster tend to leave the group and one reluctant farmer can damage the prospect of a whole group of prospective consumers.
- 5. Indebtedness of farmers stands in the way of fresh lending. Specially, those who fail to clear earlier loans become ineligible for new loans.
- 6. A few other causes are incomplete revenue records, the rigid spacing criterion and rivalry and conflicts among villagers.

While reviewing progress, the MI Scheme came out with some administrative changes for the future. Firstly, there should be close cooperation between the MI Office and the lending bank, and the project officer should be represented on the board of the LDB.

Secondly, to avoid delay in completing the formalities, the VLW should help the farmers in respective areas.

Thirdly, there should be a target fixed for the Assistant Engineer in charge of rural electrification so that he feels concerned about fulfilment of targets. The delay in releasing electricity connections must be cut down.

Fourthly, those who would be directly involved in project implementation must be young, trained and courteous.

Fifthly, in case of failure of a tubewell the farmer should be given a minimum of 50% subsidy towards the cost of the project.

Lastly, competitive loaning among a number of financial institutions in the same area and for similar purposes should be avoided. Special mention was made in this context of the Agricultural Development Branch of the State Bank of India.²

While the MI Scheme limped along and finally died unceremoniously, a new scheme was launched in the district apparently without learning anything from the sad experience

^{2.} This account is extracted from the <u>Kekri Minor</u> <u>Irrigation Project</u> (in Hindi) published by the Rajasthan Government.

of ill-fated minor irrigation scheme.

Minor Irrigation (MFAL) Ajmer Scheme

Under the aegis of the Special Schemes Organization at State Headquarters, the Minor Irrigation Scheme (MFAL) Ajmer was launched in 1975-76 exclusively for the benefit of the marginal and small farmers. The scheme covers the entire district including Kekri PS jurisdiction. It provides 25% subsidy to the small farmer and 33.3% to the marginal farmer. Loans are sanctioned for digging up of new wells, deepening of old wells, purchase of pumpsets etc. The scheme is restricted to only Zone A as defined by the ground water survey.

It is a district based scheme with a project officer as its head supported by two agricultural officers, two land valuation officers, two junior engineers, one draftsman, two tracers and some clerical and ministerial staff.

On enquiry, it was found that nine farmers in the Kekri area have been sanctioned loans for the purchase of pumpsets.

A glaring example of communication gap and possible overlapping of functions can be found between two schemes: the old Minor Irrigation Scheme (Kekri) and the new Minor Irrigation (MFAL) Ajmer Scheme. The two schemes have been operating in the same area for over a period of one and a half years and

both have been providing loans for the same purpose. project officer, MT Scheme Kekri, expressed his complete ignorance about the official reasons for starting a new scheme covering the same area. But he speculated that the new scheme was perhaps launched in view of the expiry of the old one. It was a surprise to him that the MI (MFAL) had already disbursed loans to nine farmers in the Kekri REC scheme area. Looking at the list of the farmers who had received loans through MI (MFAL) he was taken aback and observed that out of the nine farmers seven had received same amounts of loan and on the same dates through the good of fices of his own project. One farmer received Rs.4,900 on 11 October, 1976 for purchasing electric pumpsets from PLDB through the recommendation of MI Scheme, Kekri; but later on he came to know that as he was a small farmer he would get 25% subsidy for pump set loans if he would apply to the MI (MFAL) Ajmer. So he applied for it expecting that he would soon receive the subsidy. The manager of the LDB Kekri, when asked about the case, said his bank was not aware of the incident. Apparently, when there are too many schemes and organizations some farmers can reap the benefit of multiplicity, although the organizations would not know if they were working at cross purposes or not.

In Kekri PS area, an irrigation project was also cited near Para Village and the farmers were drawing on surface irrigation water for their cultivation.

Reference has already been made to the financial institutions operating in the Kekri area, principal among which is the LDB, which consists of 3 State Government nominees and 5 local government representatives elected for a three-year term by the members from among themselves. At the time of the present research work, the board of the Bank stood dissolved due to certain irregularities and the Project Officer in charge of Soil and Water Conservation was appointed as Administrator of the Bank by the State Government. The day-to-day activities of the Bank are looked after by the Secretary who is on deputation from the State Cooperative Department.

Since loan is given on the basis of collateral, there is a lengthy procedure which every farmer has to go through before he can expect any loan release. Certificates of ownership and cultivation including land maps have to be obtained from the inevitable patwari. No-due certificates have to be obtained from the financial institutions. When the loan application is finally submitted to the bank, the file is forwarded for further scrutiny to the project officer concerned in order to get technical and land valuation reports and

In Kekri PS area, an irrigation project was also cited near Para Village and the farmers were drawing on surface irrigation water for their cultivation.

Reference has already been made to the financial institutions operating in the Kekri area, principal among which is the LDB, which consists of 3 State Government nominees and 5 local government representatives elected for a three-year term by the members from among themselves. At the time of the present research work, the board of the Bank stood dissolved due to certain irregularities and the Project Officer in charge of Soil and Water Conservation was appointed as Administrator of the Bank by the State Government. The day-to-day activities of the Bank are looked after by the Secretary who is on deputation from the State Cooperative Department.

Since loan is given on the basis of collateral, there is a lengthy procedure which every farmer has to go through before he can expect any loan release. Certificates of ownership and cultivation including land maps have to be obtained from the inevitable patwari. No-due certificates have to be obtained from the financial institutions. When the loan application is finally submitted to the bank, the file is forwarded for further scrutiny to the project officer concerned in order to get technical and land valuation reports and

estimates. Aft r the file would be back, the bank would finally look into the case and take a decision on loan eligibility. The farmer, if he is found eligible, would then be asked to do the registration of his land and at this stage 8% of the loan amount would be taken as share money to be adjusted at the time of payment of last instalment of the loan. It is no easy task for farmers to pass through the different hurdles and ultimately get the loan after necessary deductions and, of course, some extortion.

Bank of India has been able to simplify the loaning procedure to some extent. To get the patwari's certificates, one-day camps are organized with the help of the tahsildar concerned in the vicinity of the villages. The certificates are issued on the spot. Then, of course, the no-due certificates are obtained from the other financial institutions. The Bank tries to disburse loan on the day the application with supporting documents would be submitted. No wonder, lately farmers have started preferring the SBI to the LDB.

At the project level (block level), the office of the BDO has been slowly losing its importance, as the Agriculture Department is being reorganized vertically and its field officers including the VLW are formally independent of the BDO. Publicity of schemes through the VLW depends on the

degree of importance attached to such schemes by higher level authorities. Reportedly, the VLW has lately been used more for the propagation of the family planning scheme than for any other developmental programme.

It is within this organizational situation that the REC scheme came to be located in Kekri.

Chapter III

Kekri : THE REC SCHEME

The Kekri electrification scheme was suggested by the RSEB in June 1972. The scheme area was inspected by REC team in August 1972. In principle, the scheme was found all right; but there was delay in release of loan by REC as the RSEB failed to produce the ground water certificate in time. First instalment of loan was received in February 1973 and the scheme was spread over 1972-76. The major highlights of the scheme are: 1540 agricultural pumpsets, 100 LT and agro-industrial connections and 3600 domestic and 500 street light connections. Detailed technical support system (lines, transformers etc.) was worked out to achieve the targets in a phased manner, of which agricultural connections were the most important. The purpose of this chapter is to trace the slow progress of the scheme and the next chapter identifies operational and other bottlenecks that impeded smooth functioning.

It took more than a year simply to bring the project down from the planning table to the ultimate field of operation. The scheme was submitted by Rajasthan State Electricity Board on June 3, 1972, but the first construction work in three of the selected villages was started only

in the month of July 1973. This period 13 months was spent in completing all formalities among the involved organisations: REC, RSEB, Rajasthan Government, and Rajasthan Ground Water Board.

With a year's delayed start the construction work for electrification moved at a very slow speed and it continued to be so in the subsequent years with minor exceptions in the second and the fourth year of operation. At the end of the project period the achievements (except in the case of 11 KV lines) reached nowhere near the targets. The most damaging failure is in the case of laying of LT line which remained at a level slightly over 40 per cent of the target (See Table 1).

Service Connections

A target of energizing 1540 out of 3754 existing working wells over a period of 4 years was apparently not too ambitious a programme. The PEC and the RSEB specialists who appraised the scheme during mid '72 did not observe any important snag which could have stood in the way of achieving the target. With minor modification of the targets relating to street-light and economic connections, the REC appraisal team reported that the scheme was financially viable, technically feasible and physically

Table 1

Targets and Achievements over the years (Technical Support)

Percentages		18.22	37.37	62,45	46.52	40,44
LT Lines (KM) Tergets Achieve ments		14,58	29.90	44,97	33.50	122.95
Target		80.08	80.0	72.0	72.0	304.0
rs Percen- tages		53.65	93,33	15,38	83.33	23.94
Transformers Achieve-		33	88	Q	Q	57
Tar- gets		41	30	13	9	06
KM) - Percentages		86.84	138.63	53.43	183.67	99.74
11 KV lines (KM) Ter- Achieve-Pe		49.50	55.45	3.74	5.57	107.0 106.72
11 KW Ter- gets	and the state of t	57.0	40.0	7.0	ပ ဗ်	107.0
S1. Years		1. 1973-74	2. 1974-75	3, 1975-76	4. 1976 -77	rotal.

attainable. Not even, Rajasthan Ground Water Department sourced any note of doub, regarding availability of ground water required for the energised pumpsets.

The scheme, however, started limping from the very beginning. After one year of its operation it succeeded in extending connections to about two dozens wells in three villages while the target for the year was to energize 390 wells in 21 villages. The pace of progress did not pick up appreciably even in the subsequent years, and after four years of operation of the scheme the achievement rose to only about 20% of the target (See Table 2). The number of wells connected in the course of four years is only 318 which, in fact, is far less than the first year's target set in the project.

Even this 20 per cent achievement over four years does not properly reveal the real extent and the exact nature of the failure of Wekri electrification scheme (See Table 1). Strangely enough, in 15 of the 44 villages falling within the Scheme area not even a single connection has been released so far. There is still no effective demand for connections in 10 of these 15 villages. The achievement figures in different villages under the scheme would show that only in 4 of the villages achievement is either 50% or slightly above it. Table 3 indicates the rate of achievement in different village clusters.

Table 2

Year-wise targets and actual release of different kinds of connections

	Agr	Agricul tural	ıral	Ind	Industrial	al	Stre	Street Light	ight	Нои	se and	House and Others
ก ปี	H	F	d	E	P.		The state of the s	H	<u>a</u>		≪.	Δ,
	an addressive arresting or		best derer bittelefelser bieneftiget fer aufführt		And Andreas was the state of th	A Broom Landschild derug derug Services beek fil	Appeared Protes dutto fitted instant in		gives sharey designation desay fromthe suggests	ng pahagpa at aggs. Parates Associational	Marie British and Water Miles and Water William	mana mana mana mana mana mana mana mana
2-74	1 1073-74 390	50	12,82	20	2	10.00	20	1	0.0	300	1	0.0
0 1074_75	3000	09	15.38	000	16	80.00	100	35	35.00	200	136	27.20
7 2	320		35.14	20	60	145.00	100	48	48.00	200	186	37,20
4. 1976-77	4. 1976-77 390		00.00		24	00.09	150	200	17.33	200	164	23,43
						16 Pales many Dright Edges standards Arthur water	And September 1	and the second s	a Bright webs (Anthrophogo) being leiter	place were true assis. Fig.	medicana speciment provinces have	pages print, sensi-badis legal blind judis sensi
Total	1540 318	318	00.65 100 71	100	71	71.00	400 109	109	27.25 2000	0006	486	24.43

T - Targets

A - Achievements

P - Percentages

Table 3: Achievements in village clusters

	Percentage of Achievement	No. of Villages	
magazar antanang manang ang			anyangahari Magainyassahilifilihari
	0%	15	
	Upto 10%	, ¹	
	10 to 20%	7	
	20 to 30%	7	
	30 to 40%	5	
	40 to 50%	3	
	50 and above %	4	•
Comment or Superior and Superior Superi	Total	44	

The office of RSTB at Kekri so far (as of June, 1977) received only 448 applications for agricultural connections which is even less than one-third of the target for energising 1540 wells. Surprisingly, 104 i.e. more than 23 per cent of the applications were cancelled due to reasons like failure in payment of security deposits in time, failure of cluster-grouping after application, and non-conformity with the voltage regulation rules. Twenty six i.e about 6% of the

applications are pending with the Board office for 3 to 7 months for shortage of meters. As the scheme was limping along toward an inglorious end, the REC monitoring report in July 1976 came out with interesting findings. Special stops were suggested to accelerate the pace of work. Firstly, it was suggested that immediate measures should be taken to avoid frequent power cuts at the time of sowing and during preharvest period, so that the farmers do not have to switch on to diesel engi-Secondly, the local officers have to keep in touch with the farmers explaining to them the advantages of pumpset connections in preference to other modes of watering their fields. Facilities for institutional finance should also be propagated. Thirdly, the RSEB would have to speed up work during the post-harvest period and try to get as many applications as possible, as the farmers would be having ready cash at that time. Fourthly, the RSEB officials have to establish proper coordination with the developmental agencies operating in the project area in the interest of effective functioning.

These exhortations of the monitoring teem came rather late in the day when the scheme had almost reached its last leg.

Cha ter IV

Kekri: Analysis of Administrative Confusion

the conomy of an area is more than sectoral planning.

It has to be a concert deffort of a number of organisations that are relevant for area development. The inter-organizational linkages would necessarily be both horizontal and vertical. Planning, in this context, will be the endeavour of an 'organization set' whose members have to produce an area development plan through a continuous process of interaction among themselves. The understanding that will be reached at the stage of planning would be useful for implementation also. Once the complementary roles of participating organizations would be spelt out, plan execution would not have to face organizational incompatibility.

The greatest snag in organizational interaction in relation to the rural electrification project at Kekri can be traced to its planning process. When the Kekri rural electrification scheme was undertaken in 1972, developmental plans in Rajasthan were exclusively the concern of specific ministries and departments. Since 1974, the Special Schemes Organization (SSO) of the Govern-

ment of Rajasthan has been playing a key role in coordinating project planning as well as implementation. Both the REC and the ARDC schemes for Makri Panchayat Samity area were launched in the same year. But the Rajasthan State Electricity Board and the Minor Irrigation Department which formulated the respective schemes, did not seem to have made any serious attempt to sort out the basic problems of coordination among them in relation to the projects at Makri. The two schemes are mutually supportive of each other and their location in space is the same. Yet, each was conceived as insular departmental scheme. The natural interdependencies between the schemes were not worked out at the planning stage itself.

other in the area for about five years. Each department is having its specific goals linked to the ultimate objective of rural development. But the basic guidelines of the ARDC and the REC seem to be falling apart. In the ARDC project ground water data are interpreted in terms of spacing, (200 metres, or 300 metres) - according to the ground water potentiality of different areas. Accordingly, loans are issued by the PLDB for energisation of pumpsets in wells which exist in specified distances from one another. The wells which do not satisfy the spacing

criteria do not qualify for loans. In the REC project area, the RSEB follows a cluster approach, which means the wells proposed to be energised must fall in a compact territory, and these have to satisfy the financial viability and technical feasibility criteria of the REC. Though at some places a degree of flexibility was observed, there were occasions when the two departments would come out with conflicting stands in the actual field of operation.

The differences in approach between the ARDC and the RSFB (RFC) are due partly to the spatially indefinite water-table data provided by the Rajasthan Ground Water. Board (Jodhpur), which is still in the stage of semi-detailed water-table study. The ground water certificate indicates present level of water-reserve, present rate of annual discharge and recharge, and the expected position after the implementation of the proposed energisation programme. It does not provide any village wise micro-survey data to facilitate selection of specific sites for electrification.

The basic difference between the two departments is also reflected in area selection. ARDC never senctions loan for wells which fall in the "C-Zone" (Non-potential area). But for technical consideration, RSEB (REC) can not always exclude villages in C-Zone. In Kekri 5 such villages falling in C-Zone were electrified under the REC scheme.

Absence of Appropriate Field Data

A study of both the REC and the ARDC project reports indicate that the basic data on which both the projects were drawn up were inadequate and inappropriate. The most important factors which had direct relevance to the status of the Kekri project but which seemed to have been overlooked were: (1) specific (detailed) land holding structures including mutation of property; (2) existing surface water resources in precise locations; (3) irrigation plans in the area of the Irrigation Department in the foreseeable future; and (4) existing number of pump sets operated by diesel or those belonging to indigenous variety.

perand estimation for planning purposes seems rather fuzzy at the moment. The Kekri project area has been having a large number of wells which have gone out of use due to lack of adequate ground water. In estimating demand for pumpsets, the number of existing wells is accepted as a crude measure. With the help of grampenchayats and the VLW, it is possible to ascertain effective demand for pumpsets by an initial market survey of potential consumers. This might yield more sound evidence of households really interested in getting connections. The potential consumers can then be put on the map to find out natural clusters and to lay the electricity line.

It seems important data regarding rainfall, climate variation, cropping pattern, land use profile of the project-area were not collected. Both ARDC and RSEB (REC) project reports seemed to have been depending on data relating to the entire Ajm r District. This indicates that no systematic field survey for the project area was made for landing basic data support to planning.

Surprisingly, many-a-time the basic data regarding population and number of wells in different villages figured differently in the two project reports, although the projects were taken up about the same time.

Turning to the process of target-setting understandably the RSFP's target for agricultural connections would be more than that of ARDC's for giving loans, as it can be expected that some people would pay from their own resources. But at Kekri, ARDC targets were less than one-third of the RSEB targets. No explanation was given for it in the RSEB project report (REC Scheme Target 1540, ARDC Target 500). The probable reasons for such wide difference are: (i) difference in planning approach (spacing criteria) of the specific departments, and (ii) absence of appropriate basic data as common source for all departments and (iii) lack of communication between the departments. In the fifth year of the REC financed project, it can be said in retrospect that the

targets were inflated out of proportion with the realities of the field situation.

Departments left out of planning

Two important og ncies viz., Irrigation Department and State Land Development Bank, which had very crucial roles to play in the success of the Kakri rural electrification scheme were not consulted during plan formulation. has adversely affected both electrification and minor irrigation projects. No effort has yet been made to bring the electrification and the minor-irrigation projects in line with the irrigation dam projects of the Irrigation Depart-The Irrigation Department is at present having two bund projects (Lasaria and Bisundani) and two tank irrigation bund projects (Para Dam I, Para Dam II) in the Kekri REC project area. With the completion of Lasaria Dam, most part of village Jalkakhera which has at present 10 agricultural connections out of a target of 21, would be inundated by the dam water. The fate of the villagers is hanging in the balance as they still do not know what alternative arrangement would be made for them, and what they would do with their pumps ts. At the same time they have to repay with interest the loan taken from the PLDB. The damage to the electrification department can be understood from the fact

that the construction notwork in the village has to be pulled down. Another instance of lack of spatial planning is provided by the status of the project at village Para. Situated near a tank bund, the village fields get irrigation water at the aper rate than electricity tariff. Naturally therefore, out of a target of 69, Para has taken only 7 so far.

Land Development Bank in 1975, the PLDB at Kekri started disbursing loans to the farmers for purchasing dieseloperated pumping sets even in the REC project area, as the demand for electrical pump sets is very few in number in that area. The Bank's stand has been that though it has no role to play during the formulation of the REC (RSEB) or the Minor Irrigation plans in an area, it is the Bank which suffers most in case of dismal failure of wrongly formulated plans. The SLDB has now requested the Government of Rajasthan that it should be represented at the formulation stage of all plans in which it will be called upon to participate financially.

Lack of Credit Planning

The RSEB's electrification plan has been dependent on the SLDB for supply of credit. Later on, in June 1975, the State Bank of India (Kekri Branch) opened its Agriculture:

Development Branch for advancing loans to farmers for a variety of purposes including purchase of pumpset and electricity security deposit. This raises a more basic issue regarding coordination among the bodies supplying institutional finance. At the time of drawing up the REC financed project for Kekri, there was no vidence of a supportive credit plan to back up the scheme. As the execution of the scheme was in progress and new financing agency like the SBI appeared on the scene, even then no attempt was made to make a close fit between the project targets and the credit supply in the project area.

Organisational Multiplicity

There are a large number of field organisations of different departments that are related to the rural electrification project work at Kekri. Some of these organisations have direct relations with the RSEB offices at different levels, while a few others are having somewhat indirect relations with them. The Minor Irrigation Department, the Rajasthan Land Development Bank, the Rajasthan Ground Water Board, and the District Administration (Revenue Wing) are directly related to the RSEB (REC) offices for various specific purposes. By contrast, the relationships between the RSEB (REC) offices with Panchayat Administration, Cooperative Societies, and the Agriculture Development Branch

of the State Bank of India (Kekri) are indirect in nature.

Irrigation department has a vital stake in the electrification work in the area, but it remains almost unrelated to the project barring some occasional participation in the meetings of District Coordination Committee.

Coordination, both at planning and implementation stages, needs an organizational niche -- an appropriate level wherefrom to operate in concert and cohesion. project (block) administration level should have been the right place for the coordination of activities of the different 'functional' and 'loaning' organisations relevant to the project. The Coordination Committee at the district level has over the years emerged as a platform for organisational interactions in the process of implementation of the developmental projects at Kekri. Since September 1972 there has been a coordination committee at the project (Block) level which meets once in every month. But the meetings of the Block Coordination Committee have in fact turned out to be a mere customary get-together, rather than effective decision-making forum, as no vital decision affecting the electricity department can be taken at this level. RSEB (REC) Assistant Engineer who is a member of the committee at Kekri has very little discretionary power regarding ins tallation or shifting of transformers to facilitate coordination with Minor Irrigation Department. At the District

level, there is a District Coordination Committee of which the Executive Engineer (RSEB-RFC) is a member. Problems of inter-departmental coordination are often referred to this body which meets infrequently -- once in four months. When matters are pushed up to this forum, it inevitably leads to delay.

RSFB and PLDB

In our search for explanations -- why the situation at Kekri is what we have seen -- the internal structure and operational procedures of two implementary organizations, the RSEB and the PLDB assume considerable importance. The technical expertise is supplied by the RSEB, which the PLDB is the major source of fund supply. The MI Office at Kekri which was set up in July 1973 has been the main extension arm of the PLDB. It has provided the vital link between the farmer and the loaning agency. So far as the RSEB is concerned, the way it is structured and spatially located goes a long way to determine the effectiveness of the organization. Its work processes are equally important in this connection.

The electrification scheme, it seems, has been conceived as an exclusive planning responsibility of the RSEB.

At the time of project formulation, aside from the ritualistic data collection to satisfy REC requirements, no other

departments were actively involved in planning.

The project planning thus boiled down to functional planning rather than area development planning. Only when the project was taken up for ground-level execution, the need for close understanding between the RSEB and other field organizations had suddenly become important. At the implementation stage, the field organization structure and work processes of the RSEB seem to have impeded the progress of the scheme. To the project level officers of the Board, electrification is a technical job which they will undertake to do only when the farmer approaches them. At best, the MI Office will do the extension work and motivate and bring the farmers to the local RSEB office. The rules have been formulated by the Headquarters and work would be undertaken according to rules. At the base level, the farmer is left to the care of long-winding rules, and junior engineers and his entourage. When rigid rules do not fit in with the farmers' requirements, administrative aberrations overtake the rules. This is what passes for 'corruption'.

The Procedural Hurdles and Corruptions

The operational procedures of the departments prove to be a major hindrance to the smooth and efficient function-

Case studies of Corruption are appended to this report. 180 farmers were interviewed in 16 villages in the project area for the purpose.

ing of the organisations at Kekri. The formal procedures, particularly of the RSEB (REC) and the Primary Land Development Bank are so lengthy and cumbersome that those often cause delay and harrassment to the applicants. The formal procedures cannot support the organizations; these are supplemented by informal corrupt practices, and over the years, these very deviant procedures have come to dominate. Eighty five per cent of the consumer-respondents interviewed by us reported that they had to subscribe to corruption of one or the other department at different stages.

Under the rules, no extension of lines for giving new connections can be made, if it does not ensure adequate (a necessary minimum) consumption of electricity. Consequently, an individual farmer interested in energizing his wells is always put under compulsion to join a cluster of five or more people. The trouble of the farmer is not over with persuading five or more others of that locality to apply for connections; he is to make constant efforts to keep the group alive till the time of deposit of security money in response to the Board's 'Demand Notices'. Out of 140 consumer-respondents as many as 80 reported that they had to face such problem. But the interesting fact was that 63 i.e. about 80 per cent of the farmers who were asked for forming new groups failed to do so. For them there were

only two alternative options - (i) to step back from energization of wells, (ii) to pay for extra-polls as suggested by the board people and to accept higher HP motors than what they actually needed. To pay for extra-polls and to accept higher HP motors were said to be the only procedural leverage to issue connections to those farmers. Facing such situations 37 (i.e. over 60 per cent) of those consumer respondents reported that they were about to give up the idea of energization of wells. All of these respondents alleged that they had to grease the palms of officers for getting connections.

The 'minimum meter-charge rules' of the electricity department seems to have been dampening farmers' initiative to take electricity connections. The department works out minimum meter-charges annually but the collections are made monthly. Consumers are to pay minimum-meter charges even for those months such as the rainy season and draught period when they have no need of electricity for agriculture purposes. This seems to have discouraged 4 out of 20 non-consumer respondents from taking connections. Characteristically all of them had less than 5 acres of land holdings, and they opted for continuance of traditional method of irrigation.

The lending procedure of the Primary Land Development Bank is no better than that of the RSEB. The prescribed application form of the TLDB is a four-page piece costing R. 2 per copy. The applicant is to run after the patwari of the particular village and other people in the revenue department for days together to collect 'Jamabandi' and 'Girdawari' certificates. He is also to collect 'no-due' certificates from 3 or 4 local financing agencies. Then he is to pay a series of visits with relevant documents to the Minor Irrigation project office to get his application passed by that office.

Socio-economic factors

Officials, sarpanches, village level workers who were interviewed in course of research referred to a number of deeply entrenched socio-economic factors impeding the progress of the scheme. More important among these are: (1) Small and scattered plots or agricultural holdings, (2) Joint family ownership of agricultural holdings, (3) existence of large scale indebtedness among the farmers, and (4) illiteracy among farmers who are not quite familiar with the rules and regulations relating to energisation of tubewells with the help of REC scheme or any other development scheme.

The view that small land holdings tend to discourage farmers from taking electricity can be easily appreciated. The average holding structure is only 2.4 hectare (slightly over 5

acres). But sometimes average figure is misleading in view of the fact that there are about 150 'Khatedars' (farmers having more than 130 acres of land). All these 'Khatedars' are from 'Thakur Caste' who enjoyed 'Jagirs' over three or four thousand villages during the British rule. The existence of small holdings on the one hand and a few large holdings on the other create a situation where modernization of agriculture is usually looked at as the prerogative of the big farmer.

The problem of joint holding is also comprehensible. In many cases after the death of father (in farmer family) the land-holdings under the family possession are not properly partitioned among the sons due to some legal or procedural delay. In such situation even if one of the sons desires to take electricity connection, he may not be able to carry others with him. Such cases of abortive attempts are not uncommon at Kekri.

To sum up, lack of plan coordination, procedural bottlenecks, administrative corruption and socio-economic forces combined together to frustrate the development efforts at Kekri. Organizational confusion seems to have taken a heavy toll of the Kekri project, and it is here that the REC scheme has important lessons for area development projects in general in the country.

WEIR: THU SEITING

Weir Panchayat Samiti falls in the most fertile tract of Eheratpur district. 22% of the cultivated area of the Panchayat Samiti is irrigated and the remaining part is still dependent upon monsoon. In recent years there has been considerable progress in the adoption of improved varieties of seeds and fertilis rs and the people of the area have been evincing keen interest in adopting techniques of modern cultivation. However, a large number of farmers, especially smaller ones, can resp the benefits of green revolution, only when irrigation facilities are made available to them. Later in this chapter we will give an account of the cropping pattern and the state of irrigation in the PS area.

Weir is one of the thirteen Panchayat Samitis of Bhara pur district and copers an area of about 614 Sq. Kms. It is situated in western part of Bharatpur district. It is bordered by Mahua Panchayat Samiti of Sawai Madhopur on the west and Nadbai Panchayat Samiti of Bharatpur district on the north. On its eastern side lies Sawar Panchayat Samiti of Bharatpur district. Weir is also a Tahsil Headquarter. It has a higher secondary school. It is situated on Bayana - Jaipur Road. The near st railway station is Bayana on the broad-gauge of Western Railway on Bombay-Delhi route.

Weir is well served by commercial banks and other financial institutions. The town has the offices of the State Bank of Bikaner and Jaipur and the Bharatpur Central Co-operative Bank. Bhusawar, within the TS area, has the branches of the United Commercial Bank and the Co-operative Bank. Punjab National Bank has a Branch at Halena village. The State Bank of India and the Provincial Land Development Bank have their branches in the PS. Besides, the Primary Co-operatives serve the villages within the Samity area. SBBJ is the lead bank of the district. There is a Krishi Upaj Mandi at Bayana and one more is proposed for Bhusawar.

The Panchayat Samiti area is, physiographically, generally plain to undulating except the southern portion of the area which is dominated by isolated hillocks. The northern part of the region is drained by Banganga — an intermittent, ephemeral river. The area has a semi-arid type of climate. Annual rainfall, as recorded at Weir town during 15 years period (1961-75), has varied from 402 mm. in 1968 to 1089.6 mm. in 1967. However, the annual average precipitation amounts to 694.7 mm. Rainy season starts from the middle of June and extends up to middle of October, with small quantity during winter. The area has a pretty hot summer, a cold winter and a short monsoon season.

Irrigation: Improvement in agriculture needs the support of irrigation facilities in the PS area. Since surface irrigation is not possible, ground water exploitation seems the only way out. Ground water in Wir block occurs under water table conditions.

The wills which are located in younger alluvium yield better discharge than that of older alluvium and quartzite due to presence of coarse sand and gravel at places. Wells in older alluvium and quartzites yield meagre to moderate discharge, due to the presence of high clay content.

Based on the findings of present hydrogeological reconnaissance survey, Weir block has been divided into three zones. The future ground water development in two zones is proposed by way of constructing medium duty tube-wells, dug wells and deepening of existing wells by boring and rock blasting. Installation o pumping sets has been also proposed, wherever feasible. These findings provided the basis for the ARDC project launched in 1975.

Cropping Pattern

In the cropping pattern of Weir Tehsil (see Table 1), emphasis is by far on foodgrains. In 1973 Kharif, as much as 62.5% of the total cultivated area was under foodgrain crops and in Rabi the comparable figure was 68.7%. Nearly 59.4% was under cereal during kharif. Among the kharif

under unirrigated conditions. Jowar, another important crop of the area, is also an unirrigated crop of the tehsil.

Paddy is also grown in some parts of the tehsil where sufficient water is available. Among the oilseeds til and groundnut are cultivated under rain-fed conditions. Sugarcane is also grown in some parts of the tehsil having adequate irrigation. Among the cash crops, oilseeds covered as much as 21.2% of the total cropped area during kharif. Fodder and other minor crops occupied 16.5% of the area. Clearly, Bajra, jowar and pulses are the main crops from the view point of area covered and in cash crops, oilseeds are important.

Rabi, wheat, barley and gram are the principal food-grain crops of the tehsil which together occupied 68.7% of the total area under rabi cultivation. Among the foodgrain crops wheat is the main crop which occupied 18.7% of the total cultivated area. Bulk of wheat and barley cultivation takes place under irrigated conditions. Gram covers 28.9% of the total cultivated area in rabi. Among the cash crops, oilseeds covered 31.3% of the total cultivated area.

Foodgrain crops are dominant in the area from the point of view of area covered. The area irrigated during rabi was 8.3 thousands hect., constituting only 26.5% of the

Weir Tehsil: Arsa under principal crops, 1973 (800 K ct.)

I. KHARIF

Crops	Irrigated Area	Unirri- gated Area	Total Area	% of total area under cultivation
Paddy	-	0.1	0.1	0.4
Jowar		1.2	1.2	4.4
Bajra	rode	14.7	14.7	53.8
Pulse	-	0.9	0.9	3.3
Uilseeds	0.1	5.7	5.8	21.2
Sugarcane	0.1		0.1	0.4
Fodder		4.3	4.3	15.8
Mixed	_	0.2	0.2	0.7
Total	0.2	27.1	27.3	100.0
II. RABI				* **
Wheat	5.3	0.5	5.8	18.7
Barley	1.6	0.2	1.8	5.8
Gram	0.3	8.5	8.8	28.4
Pulses		0.2	0.2	0.6
Oilseeds	0.7	9.0	9.7	31.3
Gojera	0.2	0.1	0.3	1.0
Gochani	0.2	4.0	4.2	13.5
Bajra		0.2	0.2	0.6
Total	8.3	22.7	31.0	100.0

total irrigated area. The remaining 73.5% area was unirrigated. Double or multiple cropping is marginally done due mainly to low irrigation facilities.

Weir TS area is covered under the World Bank Programme for Bharatpur District which provides for cattle improvement, arrangement of feed, health coverage and marketing of milk.

Weir itself is a growing town with increasing demand for milk and there are good communication facilities for sending the milk to Bayana and Bharatpur.

Special Projects

The two projects that are relevant for our purposes are the SFDA project and the ARDC project. The former is a district-wide project which has been in operation since 1974, and was extended for a further period of 3 years with effect from April 1976. In accordance with the usual SFDA norms, farmers having landholdings upto 5 acres are given 25% subsidy for different kinds of schemes including pump sets. Under the SFDA scheme, installation of 155 pumping sets was planned in the PS area. In 1975 a much bigger ARDC composite scheme was launched in Weir PS area which included, as one of its targets during 1975-78, installation of 315 electric nump sets. The ARDC scheme divided its pump-sets target into 155 SFDA scheme farmers and 160 credit scheme farmers of all categories. In a way, therefore, the ARDC scheme, instead of duplicating the efforts of SFDA, integrated it with the larger programme.

Another striking feature of this larger scheme is the identification of only one bank - the State Bank of Bikaner and Jaipur (Weir Branch) - as the sole loaning agency for the scheme. A number of local dealers were identified for the supply of diesel and pumpsets along with service facilities. Private contractors played an important role in acting as an effective middleman between the farmers and the bank. The offices of Agriculture Department, Agroservices Centre and Panchayat Samiti were contacted to ensure timely supply of seeds, fertilisers and pesticides.

was created with two Agricultural Assistants and a few more were soon to be posted. An Accountant and a Technical Assistant were added in order that designated officers would have sufficient time to visit the farmers in their villages. One of the tasks of Agricultural Assistants was to give advice on cropping pattern, soil testing and important agronomical practices.

The ARDC scheme was thus virtually a bank-operated scheme in the sense that the SBBJ took the leading role in planning and implementing the programme components. The work was initiated on a pilot basis in a few selected villages in the first year to gain experience before full-scale launching could be undertaken. These villages were

used as central points from where the programme would be publicised. Pamphlets were printed and circulated to popularise the scheme, and demonstrations on different projects organised in close collaboration with relevant government departments and the Panchayat Samiti.

The procedural hurdles in identifying farmers and releasing loan have been removed, to a great extent, in Weir through the wide use of planned village camps which are organised by the Block Development Officer (BDO) in colsultation with the banks and other relevant government departments. To illustrate the point, the BDO fixes the dates and places where the camps would sit by rotation. The farmers of villages in the vicinity of a camp are informed about the camp through handouts and the villagelevel government functionari s such as the VLW and the Patwari. On the appointed day, the farmers would gather at the camp-site where the BDO, the bank personnel, revenue department officials, gram sevak and the co-operative personnel would be present as a team. If any farmer would like to apply for a loan, say for an electric pumpset, his application in all its detail would be completed on the spot along with necessary supporting documents. ! These completed applications would then be handed over to the bank personnel attending the camp and the farmer would be

told to visit the bank on a specific date to take the loan.

Rajasthan Government has been popularising this method of "mect-the-farmer" camping through the distribution of pamphlets published in local language.

The effectiveness of bank financing is clearly revealed in the increasing amount of loan disbursed during 1975-77 (Table 2) for pumps ts.

Table ?
Wair: Loan distributed by Commorcial Banks for purposets

Year	No. of Cases	Amount (in Rs.)
1975	156	4,91,200
1976	285	11,21,900
1977	245	14,32,000

Source: Field data

Note: The figures relate to a number of banks including SBBJ which was the principal loaning agency. The pumpsets are a mixture of diesel and electric sets.

Once farmers got used to bank-financed development and it actually helped them to improve their agricultural and allied operations, the method has been spreading fast and has become very popular among the Weir farmers.

WEIR : THE REC SCHEME AND ITS IMPLEMENTATION

The REC scheme in Weir was launched at an opportune moment. In 1975, when it has taken up, weir had by then a degree of electrification and the two development schemes preceding the REC scheme (SFDA & ARDC) had produced results and a development consciousness among the Weir farmers.

samiti area contains 151 villages out of which 7 are uninhabited. Of the 144 inhabitated villages, 136 have been proposed to be taken up for electrification. The REC scheme, as finally defined, covers 91 localities only, and the remaining 45 electrified villages have been proposed for intensification. There are 1977 localities in Bharatpur District: out of which only 367 have been electrified by the end of February, 1974, registering 18.5% electrification in the District. After implementation of the REC scheme, the percentage would go upto about 23%. Tubewell irrigation has been quite popular in the scheme area. More than 500 diesel sets and nearly 800 electric pumpsets have already been in use in the area when the REC scheme was taken up for execution. This

partly explains the ready demand situation for electric pumpsets in the panchayat samiti area. In the previous chapter, other helpful factors such as ground water availability and accessibility to markets and financing institutions have been already mentioned.

Planning:

The W ir scheme was originally planned by the Survey and Investigation Wing of the Directorate of Rural Electrification (Director: RE) of the RSEB. (Actually, the planning was done by the engineering team located at Alwar functioning under the overall supervision of the Survey and Investigation Wing at Jaipur.

The project report was submitted to REC on 23rd December 1974. As is customary, the project area was inspected and the project appraised by the REC team consisting of a Deputy Director, Accounts Officer and Assistant Project Engineer in February, 1975. Some modifications were suggested by the team, important among which are redelineation of the scheme area by cutting out two villages that were included in some other scheme, and scaling down the targets under different services, e.g. agricultural, industrial, domestic etc.

RSEB wanted the scheme area to be treated as OB, which was turned down and the scheme was asked to be recast on OA basis.

The revised scheme was forwarded to REC in March 1975, complying with all the points raised in the appraisal report. REC cleared the scheme promptly and in December, 1975 it was taken up for implementation.

The role of the Special Schemes Organisation deserves special mention in the context of the Weir Scheme. This state level organization has the primary responsibility of "projectising" special development schemes and it looks after the interdependencies among several schemes and induces planned integration among complementary schemes. The RSEB had to pass through the mediation of the SSO which examined the REC scheme in the spatical context and sought to bland the scheme with the minor irrigation scheme in the area. So, planned coordination was ensured through the institutional mechanism at the State level.

On the technical side, the scheme envisaged two new 33 KV substations, one at Halana and another at Rhusawar to be constructed by the Rajasthan State Electricity Board from its own resources.

The scheme listed out the works to be carried out upto the completion period. Time phasing of electrification was planned in such a way that out of 91 localities, 1-40 would be electrified during the first year of operation, 41-74 in the second year and remaining localities in the third year.

Salient features of the schame up to the completion period at the fourth year are shown below (Table 1):

	anner etwanellentententen etterti derrinarratung deputeratung e	
Table 1.		
Weir: Salient features of the sch	neme	
1. Total number of localities to be		
electrified a) Proposed :	91	
b) Electrified:	43	
2. Localities provided with street light	36	
3. Categories of services proposed:		
A. Agricultural	680	
B. Industrial	42	
C. Domestic	1700	
D. Streetlight	250	

The scheme was conceived as an essentially agriculture-oriented one, since agricultural load would constitute nearly 80% of the total load growth at the end of the fourth year. Using the hydrological data supporting the ARDC scheme, it was calculated that 650-700 new agricultural connections would be feasible in the scheme area. Detailed village-wise information was collected on the existing number of wells and the targets were set much below the number of xisting wells. The ARDC data and comprehensive village survey of actually working wells provided a reliable data base for sound planning.

Industrial services were planned at a low key, as detailed survey of the scheme area revealed that not more than one industrial unit per village would materialise at the end of the fourth year. It was considered that not more than 45 (later reduced to 42) additional services should be provided at the end of the completion period.

Achievements

It seems that the Weir scheme was much more cautiously prepared. The targets were much less ambitious and these were set after taking realistic account of the field situation. Caution and initial planning had a satisfactory pay off in terms of timely target fulfilment.

Within March 1978, electricication work was completed in all the 91 villages. It was expected that all the construction work consisting of the erection of MT and LT lines and transformer centres would be completed by the end of the fourth year of implementation of the scheme. Actually, against the target of 240 km of MT lines, the achievement was 150 km, a clear shortfall on this sector. The performance in laying LT lines was much better: against a target of 160 km., 183 km. lines were actually laid. By March 1978, transformers of 5150 kV/ capacity were arected, whereas the target was 3885 k.V.A. capacity. The achievement far exceeded the target.

By March 1978, the total number of connections of all types stood at 2839, of which 1018 were agricultural connections, 1260 domestic and 55 industrial. Street light connections were a polity 6 against a target of 250. Reportedly, the panchayational bodies — gram panchayats and panchayat samitis — did not show much enthusiasm and initiative in this matter, and in consequence street light connections did not make much headway. Agricultural connections had outstripped. The target, so was the case with industrial connection. All in all, the performance in releasing connections has been quite satisfactory in.

Weir project area.

Overview:

To an observer of the current field situation in Weir, the panchayat samiti area presents a spectacle of hectic agricultural activities round the year. Weir's agricultural devolopment is in a large measure due to technical modernisation via the introduction of pumpsets. Exploitation of irrigation potentialities coupled with the provision of complementary services and facilities such as credit and other inputs and marketing could be said to have brought about the spectacular change in the agricultural scene. Development begets development. The RFC development scheme was launched on the heels of a number of other schemes that had earlier been taken up in There was a developmental momentum created in the area, and the further spread of the pump #set technology through rural electrification had a fairly speedy reception by the Weir farmer

The strictory progress of the RECL scheme in Weir can be traced broadly to three sets of factors: environmental, infrastructural and managerial.

The environmental factors refer to the location of the scheme area, its favourable factor endowments in terms of soil condition and water availability, and a general social-psychological climate of agricultural

growth and modernisation created by successive new schemes in and around the project area.

The infrastructural factors basically stand for transportation network, marketing facility, and institutional framework supportive of agricultural activities.

Weir is both the Tehsil and the Panchayat Samiti headquarter, connected by roads with Bharatpur, Hindaun, Jaipur and Dholpur. Weir and Bhusawar are linked with Bayana by road. Bayana is on the main railway line to Delhi. The Samiti area has a number of important towns such as Halena, Pattena, Bellbhgar, Salempur Kalan and Chhokarwara, and most towns are connected by road with Bayana, hence there is no problem of transportation of goods. The Panchayat Samiti is will served by Government and private buses with good frequencies. The National Highway from Delhi to Bombay via Jaipur passes through the Panchayat Samiti.

Besides foodgrains productions, cash crops like oilseeds, chilly and lemon (nimbu) are the main crops in the Weir P.S. area. In lemon production Weir ranks first in the district. Weir itself is a big mandi town where agricultural produce can be sold easily. Bhusawar is also providing marketing facilities to the farmers. As pointed out in an earlier section, there is a Krishi Upaj Mandi at Bayana (the rail head) which is hardly 5 or 6 Km from

Weir. This Krishi Upaj Mandi purchases agricultural produce at government rate directly from the farmers. A proposal to establish another Krishi Upaj Mandi at Bhusawar with its sub-yard at Weir is under active consideration of the State Government. Marketing infra-structure is fairly well developed in Weir area, and further development is expected in the near future.

The presence of the Tehsil headquarter and the Panchayat Samiti has provided n cessary administrative support to rural development in seneral and agricultural activities in particular. The REC sch me area in Weir had already had a coverage of high yielding and improved varieties of different crops, as a sequel to the introduction of the World Bank scheme. At the village 1 val, the village level workers and at the block level the agricultural extension officers have been providing technical advice to the farmers. As pointed out in the previous chapter, the farmer's requirements in connection with energisation of tubewells have been met in a concerted and integrated fashion through the contrivance of planned village camps at different locations. They look after the provision and proper use of seeds, fertilizers and pesticides. These essential inputs are distributed by a variety of agencies such as, the agriculture department,

the agro-service centre (which is dominant now) the cooperative societies, the panchayat samity and a large
number of authorised private dealers. Besides, construction material needed in connection with deepening and
allied well work is easily available at Weir itself.

Both commercial as well as co-operative banks are in service to the farmers in providing loans for pump sets and other purposes in the area. There are three commercial banks in the area, a.g. the State Bank of Bikaner and Jaipur at Wair, the United Commercial Bank at Bhusawar and a branch of the Punjab National Bank at Halana. There is a branch of the Bhirstpur District Central Co-operative Bank at Bhusawar. Besides, the State Bank of India and the Land Development Bank at Bayana have also been catering to the needs of the samiti area. In the south west portion of the samiti area, new bank branches need to be opened, as banking facilities are absent in this part. Ballabgarh, and Salempur Kalan are both big villages having no banking facilities at present. Both these villages have already been surveyed for the purpose. Salempur Kalan which is a progressive village has been specially recommended for early opening of a branch. Mention has earlier been made of the actual quantum of loan disbursement in the Weir area for agricultural purposes which amply demonstrates a fairly

smooth-functioning institutional credit structure in support of the new agricultural technology.

On the organisational side, the initial technical planning was don by the RSEB, but the electrification plan was made into a kind of area development plan by the Special Schemes Organisation, which saw to it that the REC scheme was blanded with other development schemes (ARDC, SPDA) and the flow of institutional credit was assured in support of agriculture. At the sub-state (District) level, the coordinating committees have been more ritualistic than functional. This is corroborated by the field evidence of officers like the executive engineer and the block development officer. Committees seem to be serving the purpose of mechanistic coordination whereas success seems to have occurred more due to organic coordination among a number of existing and interdependent organisations and functionaries.

If mechanistic coordination would be on state fiat by creating formal forums of consultations, organic coordination would be the result of informal consultation, visits and sharing of experiences around schemes and activities that are perceived as 'common' by officers and organisations operating in the same physical space. From field visits and discussions with officers, it came to light that the role of organic coordination in area development seems much more

important than mechanistic coordination.

Role of Assistant Engineer (Project-in-charge)

Usually this kind of functional coordination takes place under the informal leadership of a generally accepted central person at the project level. In the REC scheme area, the role of the Project-in-charge -- the Assistant Engineer -- has been crucial from this point of view. Since his joining the post in April 1975, he has toured the scheme area extensively on bicycle, as no jeep was provided. Initially, he did not have any officer of his own and functioned from the Dak Rungalow nearby. Two Junior Engineers were soon transferred, and he was left with only In spite of these handicaps, the Assistant Engineer could visit the villages for promotional purposes, contact the banks for credit support and work in harmony with other state officials such as the agricultural extension officers and the block and tehsil functionaries. His knowledge of the field situation and frequent trips to project sites have been extremely helpful for project success, and it was widely acknowledged that he was easily accessible to farmers who had no difficulty in meeting him and explaining to him their difficulties.

The Weir project was thus fortunate in having a favourable combination of factors that facilitated the successful completion of the project.

The environmental forces, the infrastructural facilities and the institutional-managerial situation blended well together to create a climate of project success.

Chapter VII

CONSUMERS! RESPONSES

Consumers' responses to the different processes of electrification have been tapped to understand each process by turn as well as to find out the perceived inter-connections between processes. This section is devoted to an analysis of the procedures connected with electricity connections and of the consumers' responses to the processes of electrification.

In the course of our survey in Kekri and Weir, we contacted 311 respondents on random sampling basis, of which 110 belonged to Kekri project area and 201 to Weir area.* All of them had taken electric connections for agricultural purposes. We questioned them using a questionnaire supplemented by face-to-face queries, on various aspects of electricity consumption such as the extent of electricity consumption by them, whether they were satisfied with the services provided by the RSEB personnel and with the supply position of electricity

^{*} The total number of respondents in each case is different. Kekri survey was done first with a smaller sample. The second survey at Weir was administratively easy and the coverage was slightly wider therefore.

in general. Their experiences in getting electric connections for agricultural, domestic and industrial requirements were recorded in the survey. Whether they faced any difficulties or not, the time taken in getting connections and the behaviour of the officers and employees toward the consumers are some of the issues that were raised in the questionnaire. Suggestions were invited from the consumers about how to remove their difficulties in getting electric connections and to reduce the time lag in getting connections and they were asked if they had really benefited from electrification and energisation of tubewells.

Taking Connections:

Electrical connection is the first step in the process of rural electrification which brings the consumer in contact with electricity personnel. At this stage, besides electricity department, many other agencies are to be contacted which are directly or indirectly involved in rural development. For any kind of connections, agricultural industrial or domestic and commercial, a prospective consumer has to go through a number of procedural formalities.

Following six stages have to be followed through as a matter of procedure:

- i) Application for power supply,
- ii) Initial inspection,
- iii) Intimation of initial approval,
 - iv) Fx=cution of an agreement,
 - v) Wiring, installation and test certificate,
- vi) Final inspection and release of power.

R.S.E.B. (R.E.C.) Procedure:

A prospective consumer is to apply for electricity in a prescribed and printed form available with the RSEB office at Wekri and Weir. He has to fill up the application and obtain a certificate from the village Patwari mentioring that the well proposed to be energised lies within the revenue boundary of the village concerned and surrounding land-holding legally belongs to him. He has then to submit a court fee stamp of Pr.2/- to the RSFB office. At the time of submission of application, the applicant is charged Pr.10/- as application fee. The local electricity officer is supposed to put this application form etc. in a separate file-cover and maintain it. But in general, the departmental people ask the applicant to submit the applica-

tion form in a file cover purchased by him.

Assistant Engineer instructs one of the Junior Engineers, under whose jurisdiction the proposed connection falls, to make a field investigation and to report to the office. The Junior Engineer alongwith a line-man and a few helpers goes to the particular area, does the investigation and sends a report explaining whether the proposed connection is justifiable as per voltage regulation rules. He may suggest that the applicant should be asked to pay for the extra poles (one pole costing R.850/-) if needed for the connection.

After scrutiny, if the proposed connection is considered technically feasible, the present RSEB office issues a demand notice to the applicant asking him to deposit a lump-sum amount as a security to the main office within a month. Demand notices are usually sent by ordinary post. During field survey many farmers complained that sometime they received the demand notice very late or even after the expiry of the due date. He had to wait for a fresh issuance of the same. The electricity office rarely acts on an individual application and usually acts on a bunch of applications from farmers whose wells lie in a cluster or compact

area. This cluster approach is supposed to be best suited for the electricity voltage regulation rules. this reason, after the deposit of the money as demanded, if it is found that some or even one of the applicants has failed to respond to the demand notice, the electricity office makes a fresh assessment of voltage situation and in most cases they cancel the programme for electrifying the "incomplete" cluster. The applicants are asked to form a new cluster-group. Some time it takes them more than 6 months to form a new cluster group. During this period, no interest is paid to the applicants for the money they have deposited earlier. In obtaining connections, as reported by the sample respondents, there were many difficulties. Out of 110 respondents at Kekri 83 suffered difficulties of one kind or the other, at Weir the comparable figure is 46 out of 201. other wards, nearly 76% of the sample respondents at Kekri faced problems, whereas at Weir the sufferers accounted for a paltry 22%. This clearly shows the relative case with which the prospective consumers could approach the authorities and get connections. Whereas, Kekri farmers were undoubtedly put to difficulties and in consequence the programme suffered a set-back.

The farmers at Kekri and Weir were asked about what they thought were the bottlenecks in the rural

electrification process. The problems identified by them are shown in Table No. 1. 15 seems the Weir farmers had less of complaints against the RSEB personnel.

Table No. 1

Bottlanecks in the Flectrification Process

Problems	Ke kri	Weir
RSEB personnel creating problems including corruption	52 (47- 3)	84 (41.8)
Procedural hurdles	15 (13.6)	32 (15.9)
Heavy expenditure	6 (5.5)	21 (10.5)
Contractor System	33 (30.0)	48 (23.9)
Others	4 (3.6)	16 (7.9)
	110 (100.0)	201 (100.0)

compared to the Kekri farmers. Procedural hurdles posed problems to both groups. Heavy expenditure was an irritant more to Weir farmers than to Kekri farmers. The contractor system seemed to have bothered the Kekri farmers more than their Weir counterparts.

The attitude of the RSEB personnel toward the applicant-farmers seems to have played a crucial role.

Amount Paid:

All 311 respondents are electric users for productive purposes i.e., for irrigation purposes. of these respondents have been using electricity for domestic purposes, and some are using for other purposes such as atta chakki etc. These consumers, both in Weir and Kekri, were complaining about the amount they paid for electric charges. Generally all these consumers complained about the metre reader who would seldom reach the spot and the billing was, in their opinion, arbitrary. Most respondents had complaints against the billing system. The bills would not be intelligible to many; nor would the bills be distributed from house to house. Discount was not always available due to delay in receipt of bills, which even led to disconnection for no fault of the farmer, it was alleged. Moreover, the farmer had to travel long distances to make payment or apply for reconnections. About 56% of the respondents in Kekri and 90% in Weir project area expressed satisfaction about the way their problems were handled by the RSEB personnel. On closer scrutiny it was found, however, that the Kekri farmers were far

more dissatisfied than their Weir brethren (see Table No. 3). We asked the respondents whom they generally met in the RSEB local office for sorting out their problems. In Kekri, they generally met the line-man; 71 respondents out of 110 i.e., (65%) gave this answer.

Table No. 2

Attitude of the R.S.E.B. officials toward consumers

Married collection and	Attitude	Kekri	Weir	Total
aroud arous to	Co-operative	62 (56.4)	181 (90.0)	243 (78.1)
	Non-coonerative	43 (43.6)	20 (10.0)	68 (21.9)
	Tot al	110 (100.0)	201 (100.0)	311 (100.0)

In Weir, the respondents generally met the Assistant Engineer and the Junior Engineer. Only 19 respondents said to have met the Lineman, while 171 directly met the Assistant Engineer and the Junior Engineer. (Table No. 3). Easy accessibility of the Assistant Engineer was freely admitted by the Weir farmers in face-to-face interviews. By contrast, the Kekri farmers seemed to have been left to be dealt with the lowest level

functionsries. The respondents at both places urged for more maintanance staff like linemen who would be available for repair and quick assistance. In the absence of RSFB personnel, the farmers would many a time fall prey to unscrupulous private agencies.

Table No. 3

<u>Persons whom consumers generally met in the office</u>

Persons	ť	Kekri	1	Weir '	Total
Assistant Engineer		16 (14.5)		61 (30.0)	77 (24.8)
Junior Engineer		17 (15.5)		110 (54.7)	127 (40.8)
Lineman		71 (64.5)		19 (9.5)	90 (28.9)
Others		6 (5.5)		11 (5.5)	17 (5.5)
Total	transport follows	110 (100.0)		201 (100.0)	311 (100.0)

The Procedural Hurdles and Corruptions:

The operational procedures of the departments prove to be a major hindrance to the smooth and efficient functioning of the organizations at Kekri and Weir. The formal procedure, particularly of the

Rajasthan State Electricity Board (R.E.C.) and also of the primary land development bank is so lengthy and cumbersome that it often causes delay and harrassment to the applicant. formal procedures cannot support the organization, these are supplemented by informal corrupt practices. Charges of corruption against officials were freely voiced at both Kekri and Weir.* Payment for extra poles and acceptance of higher H.T. meters seem to have deterred the farmers especially at Kekri. In Weir, the contractor system is very common and no individual application is considered if it is not routed through the contractor. The formalities are usually gone through by the contractor in the bank as well as at the RSEB office. Often, the contractor allegedly charges higher price for the electric motors and the accessories. The electricity department works out minimum metre-charges annually but the collections are made from individual consumers monthly. Consumers are thus to pay meter charges even for those months of rainy season and drought period when they have no need of electricity for agricultural purposes. This seems to have discouraged a number of farmers especially in

Case studies of corruption and harrassment are supplied in the Appendix.

Kekri from taking connections. Generally small farmers, having land below 5 acros, opted out of the REC Scheme and decided to continue with their traditional methods of irrigation.

In summing up, it appears that the respondents look to RSEB organisations for help, guidance and assistance at all stages. But necessary cooperation does not seem to have come all the time at all places. Kekri seems to have suffered on this count more than Weir. So far as organisational toning up is concerned, rural electrification depends to a great extent on how the RSEB extends its helping hand and stands by the side of the farmer.

Rural Credit:

An important complementary item in the electrification process is rural credit. Five major agencies in the project areas have been providing short, medium and long term loans to the farmers.

- 1) Government agencies such as B.D.O. ffoce,
- 2) Co-operative societies,
- 3) Land development banks,
- 4) Commercial banks and
- 5) Others including village mahajan, landlord, friends and relatives.

According to our survey, co-operative societies and land development banks have been the major sources of finance in Kekri area. Land Development Bank in Kekri is really the major source of finance, and the co-operative societies only supply short term loans such as crop loan. None of the respondents took loan from Government agencies, commercial banks or from any other sources. In Weir on the other hand, commercial banks in the area have been the major source of agricultural credit. Branches of scheduled commercial banks i.e. State Bank of Bikaner and Jaipur, United Commercial Bank and Punjab National Bank located in Weir, Bhusawar and Halena provided 69.4% of agricultural credit. Central Land Development Bank at Bhusawar and Bayana also gave loan to the respondents. These two branches of Central L.D.B. together contributed 6.4% of the total loan taken by the sample respondents and near about 14% credit requirement was met by the cooperative societies operating in the area. Government agencies have also provided some credit to the farmers in Weir Tehsil.

Of the 110 respondents in Kekri 65 are members of the co-operative societies and the comparable number

is 72 cut of 201 in Weir Tehsil. These societies provide loan to the members only. Upto 1965 none of the respondents was a member of the co-operative in Kekri, while in Weir upto this period as many as 26 respondents out of 201 were members of these co-operative societies.

Membership of societies increased during 1970-75 both in Kekri and Weir. Presumably, the introduction of R.E.C. Scheme in both the areas and the willingness of the respondents to go for the new agricultural practices led to increase in cooperative membership. Upto 1977, 64 out of 110 respondents in Kekri and 95 out of 201 respondents in Weir have become members of these co-operative societies.

The credit institutions in the project areas have been providing loan for electric and diesel pump sets, and construction, deepening and remain of wells. According to our survey, 65 respondents out of 110 in Kekri and 95 out of 201 in Weir took loan for electric pump sets from different financial institutions. The remaining respondents either purchased these equipments from their own resources or had taken loan from some other sources. As the terms and conditions of loans

from institutional sources are somewhat complicated, some of the respondents had shown preference for taking money from Mahajans or from their friends and relatives.

The sample respondents both in Kekri and Weir reported that the time taken in getting loan was not more than the time taken by the RSEB officials in releasing connections. 55 respondents out of a total of 160 in both Kekri and Weir reported that they got their loan sanctioned within a month and 76 got it within the period of one to three months. Only 29 respondents at both places reported delay for more than 3 months (See Table No. 4).

Table No. 4

Time period in getting loan

Time period	r Ke kri	t Weir
Within a month	26 (40.0)	2 9 (30.0)
Within 1 to 3 months	30 (46.1)	46 (48.9)
More than 3 months	9 (13.9)	20 (20 . 2)
Total	65 (100.0)	95 (10.0)

In Weir Panchayat Samity, the contractors played the key role as intermediaries between the farmer and the bank. Out of 95 respondents 83 relied on the contractor to act on their behalf and go through all the formalities.

While in Kekri only 23 out of 65 respondents used the contractor in the same fashion. Here, Patwari and V.L.W. seemed to have played a more important role (see Table No. 5).

Table No. 5

Persons contacted in getting loan

described converses from the contract of the c	na managan dinagan dinagan di kacamatan di k	the way the state and the state and another state and the state of the		
Persons	K kri	Weir		
V.I.W.	41 (63.1)	5 (5.3)		
B.D.O.	(6.2)			
E.O. Agriculture	(6.2) (6.2)			
Patwari	43 (66.2)	3 (3.2)		
Co-operative officials	13 (20.0)			
Sarpanch	6 (9.2)			
R.S.E.B. officials	7 (10.8)	-		
Bank officials		3 (3.2)		
Others (Contractors)	23 (35.4)	84 (88.3)		
Total:	* 65 (100.0)	* 95 (100.0)		

comparing the Kekri responses with the Weir ones, it appears that the Kekri farmers had to make contacts at many points to get loan. This was not the case with the Weir farmers for whom it was a fairly straight forward deal with the mediating contractor. The contact profile of Kekri provides a clue to the complicated nature of the process through which the Kekri farmers had to move to get loanable funds.

Agricultural Inputs:

The respondents at both places were asked about the sources of supply of inputs like seeds, fertilisers etc. As revealed from their responses, mostly farmers both in Kekri and Weir got their inputs from private traders. In Kekri, of the 110 respondents 82 purchased their inputs such as seeds, chemical fertilizers and pesticides etc. from private traders. The comparable number in Weir was 185 out of 201 respondents. Cooperative societies seem to be playing a minor role in this respect in Weir, where only 5 respondents reported to have received their inputs from co-operative societies.

^{*} Out of 110 respondents in Kekri, only 65 took loan from financial institutions. The comparable number in the case of Weir is 95 out of 201.

In Kekri, 28 out of 110 respondents and 11 out of 201 in Weir got their inputs from respective B.D.O. offices. Mostly farmers have been depending for inputs on private traders. Farmers at both places also referred to irregularity of market supply of inputs and higher prices. This has, however, not deterred fthem from adopting new agricultural practices. At both places, an insignificant minority - 7 out of a total of 311 respondents - did not report adoption of the new technology. Tropagation of the new agricultural practices by the block-level agricultural officers including the V.L.W. was confirmed by the respondents. But the supply of inputs did not go hand in hand with publicity.

Summing up:

The responses of both Kekri and Weir farmers to the processes of electrification and supply of rural credit and agricultural input bring out some intraorganizational and inter-organizational issues. Farmers at both the places had to face many common problems such as procedural complication, corruption and nonavailability of inputs from government agencies. Yet on balance, the Weir farmers seem to have had a better deal than their Kekri brethren. Weir respondents could

circumvent the procedural bottleneck to a great extent by placing reliance on contractors. The commercial banks proved much more approachable and smooth-functioning. Loan applications were processed in Weir with greater speed through the arrangement of local camps. On the RSFB side, despite allegations of corruption raised by respondents at both places, the Weir farmers seemed to have received ready assistance from the RSEB personnel. Especially, the local officers at Weir such as the Assistant Engineer-in-Charge have been much more accessible as revealed from the respondents responses. The helpful posture of the technical organisation (RSEB) matched very well with the active role of the commercial banks in Weir in quickly issuing loanable funds to willing farmers. The responses of Kekri respondents do not reveal comparable situations favourable for expeditious project implementation. To many of them, the RSFB personnel did not appear equally helpful. The contractor's helping hand was generally unavailable, and the processes of loan getting proved much more circuitous at Kekri. Organisationally, it seems the Kekri respondents, unlike their Weir counterparts, had to face a relatively discordant organisation centred around rural electrification.

Chapter VIJI

COORDINATION IN ELECTRIFICATION

In this penultimate section, we may recapitulate the major highlights of the two electrification projects and draw certain conclusions about the importance of coordination in rural electrification. should be clear by now that there is no straight forward answer to the question - why the Kekri project flopped and the Weir project clicked. Nor was this the substantive concern of our research. Multi-level coordination in rural electrification is what we were asked to explore. We had hypothesised that such coordination was necessary for the successful implementation of an area development project. The REC projects being basically area development oriented, electrification has been looked at as a means of stimulating economic growth in a project area. Several REC circulars to the SEBs have sought to reinforce stand.

We have pointed out earlier that the SEB is

^{1.} Circulars No. 2/6/70-REC dated 14.8.70 and 29/T.D.28/1/71-REC dated 24.3.72 are illustrative of REC's concern for integrated area-development approach.

a direct client of the REC, yet the two organisations do not share the same end-objective. To the SEB, the REC is at best a banker. But the REC is interested in more than mere financing of rural electric lines. fundamental aim is to use electricity as a vital energy input in the process of rural development. While SEB is a 'functional' organisation, REC by contract is a 'development' organisation. There is a genuine suspicion, as revealed from the REC circulars, that the SEB may not always be in the same wave length with the REC. Hence 'integrated development', 'area development; and similar other concepts are conveyed Guidelines are issued to the SEB from time to time. to ensure proper project formulation; projects are screened fairly rigorously; and these are monitored at certain intervals. Formally speaking, the REC has been extremely careful to see that the SEB does not go off the rails. Even then, as the two case studies reveal, the REC has not always succeeded in attuning the SEB to its development philosophy. The multifaceted nature of development does not seem to have much of an appeal to the single-track functionalist mind of the SFB. The problem of how to socialise the SEB in the culture of rural development will continue

to bother the REC, and more imaginative efforts like training programmes and workshops will have to be mounted to broaden the perspective of the engineers and bring them closer to other development departments and agencies such as the agriculture department, the banks and the cooperatives. Area development —— its meaning, methodology and mechanics —— has to be communicated to the SEB in much more systematic manner than merely through occasional circulars.

Intra-Organisational Issues:

As the analysis of the two projects reveals, success depends as much on efficient management within a single organisation (a.g. SEB) as on inter-organisational relationships, both vertical and horizontal.

The SEB's own project organisation at Kekri has to share part of the blame for project failure. Its self-definition as an insular organisation and inability to forge firm links with complementary agencies at the project level (PLDB and MI, for instance) greatly harmed the project prospect. This is also borne out by the responses of the consumers as reported in the previous chapter.

Project formulation, which is again an intraorganisational activity, has been patently faulty, so far as Kekri is concerned. The basic data regarding

existing wells and diesel sets, water level and ground water potential, land use pattern and holding structure, cropping pattern, economic condition of farmers, alternative sources of water, credit facilities, extension set-up, agencies for the supply of inputs, markets and communication net work have been either missing or unsystematically collected. The Kekri project, it needs to be emphasised, was held up initially because of nonavailability of ground water certificate. When a project rests on inadequate and unsystematic field data, its execution cannot but suffer at the implementation stage. Clearly, the Kekri project had grossly exaggerated the demand estimation. The remedy, so far as demand estimation is concerned, lies in proper and scientific project formulation on the basis of relevant critical data which may have to be collected from primary sources such as interviewing farmers and house-to-house survey. On the part of the REC, it seems project appraisal and monitoring have been more ritualistic than functional. Over the years, REC has evolved elaborate procedures for appraisal and field monitoring. The Kekri project was subjected to this formal discipline. But when it came to actually enforcing changes, not much could be done to mend matters. The follow-up of REC project review seems to have gone by default. Review has to be more than a formal exercise. Firstly, the exercise has to

be timely, and the findings communicated to SEB, and then corrective action has to be enforced through a process of continuous consultation and visits. Without this, there is every likelihood of the review report being treated as a mere formality.

other intra-organisational issues relate to timely procurement of materials, simplification of procedures

(electricity connections, for instance) and elimination of corruption among field staff. With more managerial attention, both these problems can be solved to a large extent. Within the SEB, more delegation of authority to field/project staff can be considered. Complaints have been voiced by project engineers that in many instances sanctions of superior authority held up project progress inordinately.

Inter-Organisational Relations :

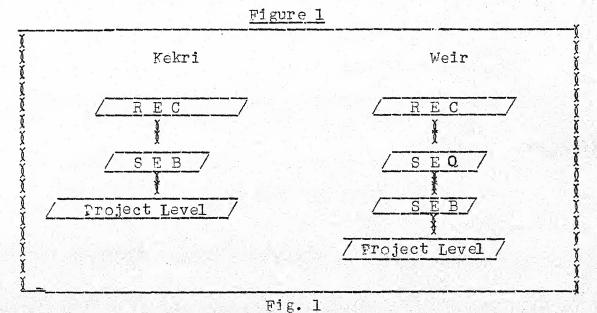
Rural electrification for rural development has necessarily to be placed in a wider organisational matrix. This is where 'coordination' assumes a major role. Vertically, two parallel streams are discernible in state administration: one that can be called the infra-structural or supportive stream another that can be characterised as productivity stream. The former basically creates conditions for productivity, while the latter is intimately involved in productivity itself. The public works

department and the SEB fall in the first category, and the agriculture department, the fisheries department, the forests department, to name a few, fall in the second. Special organisations such as SFDA, DPAF, etc. would naturally be members of the second group. Both these streams are 'coordinated' at the field level by the traditional bureaucratic hierarchy and a series of ad-hoc bodies. Thus, the generalist administrators at divisional, district and subdivisional levels act as mechanical joiners that hold together the infra-structural and productivity streams. Whenever special schemes are floated, the usual tendency is to tie the schemes to the apron string of the district collector. Coordinating committees are also set up on ad-hoc basis under the chairmanship of the collector. Bureaucratic hierarchy and coordinating committee have been the two time-tested devices to bring about horizontal coordination. Both represent mechanistic devices* that work on the fiat of government authority. They do not grow out of organic relationships or 'felt' needs of participant organisations at the field level. As our study shows, both at Kekri and Weir these

^{*} Other device in this category is planning coordination through network. In most construction projects, network is used as a tool of planning. But the network is inert; it needs individual leadership to communicate the meaning of network to the participating agencies and get their commitment.

usual administrative devices have been present. But their efficacy was questioned at both places. More importantly, the way the different organisations and agencies functionally came together at Weir under the leadership of the local project engineer exemplified a different form of coordination that comes close to what can be called organic coordination. The project success at Weir owes much to this form of coordination at the level of the project itself.

This raises the question of levels of coordination, and their interlinkages. The REC deals directly with the SEB which has its own territorial hierarchy. The Kekri project was negotiated and commissioned at a time when there was hardly any intervening governmental set-up at the State level between the REC and the SEB (see Figure No. 1). Following the REC guidelines, the project was formulated by the RSFB, and the coordinating committees at State, district and block levels were



set up. The project was, at no stage, examined in the broader perspective of area development, nor was it related in a planned way to other local development projects such as SEDA/MEAL, DEAP and ARDC. Similarly, irrigation projects in the same area by the state irrigation department went unnoticed. At the Kekri project trudged along, the problem of organisational coordination loomed large and frantic efforts were made to put the scattered pieces together.

A closer look at organisational disharmony at Kekri reveals interesting features. With the launching of the ARDC coheme, the state government issued the directive that in the scheme areas the PLDB would be the only financing agency. This was done to freeze the jurisdiction of the commercial banks, and to avoid over-exploitation of ground water resources. The State Government clearly stated at the beginning that institutional finance for energisation of tubewells would come from the PLDB and the promotional agency for the purpose would be the Project Officer (Minor Irrigation) at Kekri. The Project Officer (MI) was placed in a crucial leadership position, as he was to contact the farmers and do the

promotional job. He would be keeping in touch with the local RSFB office and serving as a bridge between the financing agency and the technical (electricity) agency. The commercial banks were asked not to finance any minor irrigation scheme in the area without due clearance from the project officer.

Realising his own importance, the P.O. (MI) stated direct correspondence with the local commercial banks and the Ajmer Central Cooperative Bank. It seems the P.O. (MI) had little contact with other scheme officers in the same area such as the MFAL Priject Officer. The latter was seen corresponding with the Deputy Secretary of State Agriculture Department regarding distance between wells in Kekri area. One would have expected the P.O. (MI) to do this kind of explication to fellow officers. The Deputy Secretary in turn had to write to the Hydrogeologist at Jodhpur to inform the P.O. (MFAL) about the spacing of wells.

The problem of horizontal coordination at Kekri received the attention of the State Government

in April 1973 when a circular was issued emphasising the importance of harmonious working of local schemes. It was directed that a coordination cell should be set up at the district level consisting of the Project Officer (Coordination), the executive engineer (electricity), and the technical assistant (geology). The cell would be under the direct control of the collector. Coordination of projects and their effective implementation would be the cell's major responsibility.

Organisational formality was thus observed by creating the cell. Actually, however, there was hardly any noticeable activity at the cell level.

Meanwhile, the General Manager of the Central Land Development Bank lodged a complaint with the State Agriculture Department that the P.O. (MI) did not care to consult them on issues involving decisions at the level of the Central LDB. The P.O. used to write directly to the State Government instead. The State Agriculture Department issued instructions to the P.O. (MI) that he should correspond directly with the PLDB under intimation to government, of course.

The PLDB was worried about the slow progress of the scheme. The P.O. (MI) was duly alerted on this issue. To quote from a letter addressed to the P.O.:

"Necessary progress can be made possible if the collection of loan applications, their sanction by the PLDB, execution of mortgage deeds and the disbursement of loans is done in a planned manner so that the different agencies and the functionaries involved in the programme may be able to know the dates by which they have to complete their work and default may be easily located. In case it is not done the Bank will not be prepared to accept any sort of responsibility for delay in the disbursement of loans and for shortfall in the achievement of targets".

The failure of the Kekri scheme, in fine, can be attributed to lack of organisational preparedness. <u>Vertically</u>, the scheme was directly handed over to the project level without any attempt to blend it with other allied local investment proposals. The SSO was non-existent in those days, so it was a direct

deal between the REC and the RSEB. Field level 'coordination' was machanically conceived by creating a coordination cell at the district level under the aegis of the collector. Coordination is not a hierarchical problem; it is an organisational necessity at the level of actual implementation in response to conditions of interdependencies. Project level conrdination did not receive the attention it deserved. The RSEB project engineer looked at the scheme as any other electrification scheme where his role was merely technical and not promotional. The Project Officer (MJ) was called upon to play a crucial developmental role. to be the link-man between RSEB and the farmers, and the IDB and the farmers. His relationship with other local level organisations such as the BDO, the Project Officer (MFAL), the AEN (RSEB) was ill-defined. Being placed at the same level, he could not evoke formal authority in support of his superior role. Nor was he endowed with extraordinary personal capacities to tower over the equals at the project level. Occasionally, he would correspond with the State level department to live temporarily in the reflected glory of the State. But, that did not work for long and he was left high and dry in the midst of a situation where organisations tended to fall apart.

To attribute failure merely to lack of coordination will surely be a rather simplistic explanation. As discussed earlier in connection with the Weir scheme, environmental and infrastructural factors are important determinants of project success. Compared to Weir, Kekri has been less favourably endowed with these factors.

Inter-organisational coordination, both vertical and horizontal, has been better structured in the case of Weir. The role of SSO in relation to the Weir scheme, perticularly speaking, has made all the difference between Kekri and Weir. Planning coordination was done at the State level by the SSO among a number of area development schemes. Before the Weir electrification project was handed over to the project level, the interdependencies were considered and inter-project linkages established. The project level thus received not a project but a project package. REC's concern for area development was actually translated into an action plan by the SSO.

The other noticeable difference was at the level of project implementation. Horizontal coordination was mechanically conceived through the installation of the district-level coordination cell. But in reality,

the RSEB project engineer. As we have characterised it earlier in the discussion, this sort of organic coordination among a set of interdependent agencies at the project level seems conducive to the success of a project. More than vertical (multilevel) coordination, concerted action at the implementation level by a set of interdependent agencies seems very crucial for project success.

Project level coordination raises the question of how to associate the 'block' administration with project implementation. The development block with the BDO as its head has been facing crosion of power in Rajasthan in recent times. With the introduction of the T & V system of extension (called the Benor Flan), a single-line administration has been set up for agricultural management. Under the new system, the officers of the agriculture department at the block and lower levels including the VLW no longer function under the overall captainty of the BDO. Also, special organisations for specific projects have the tendency to by-pass the block set-up. It was suggested by the BDO, Kekri that the REC project should have been entrusted to the block level for coordinated operation

new post, whereas the block has been in existence for a longtime and its accumulated experience would have facilitated better performance. It needs to be seriously considered how far local area level development projects could be integrated with, and not left out of the block set-up.

What emerges out of this discussion is an organisational layout that touches on the crucial nodal points in State administration. In a multi-level arrangement, initial project coordination can be competently handled by the SSO. Besides planning coordination, the SSO would have the additional responsibility of 'briefing' the participant departments/agencies in a multi-sector project, in order that each partner understands its own separate role and its relationship with other Since SSO is charged with top-level partners. coordination, it has also to do the monitoring and evaluation. The feedback from the project level needs to be systematised and the data should be used to make corrections and necessary changes in the original project design. In view of the crucial importance of the SSO in project coordination at the planning level, the SSO may need an "inspectorial" wing to

go down to the field at certain intervals and inspect project progress. At the moment, this important responsibility is going by default.

Below the level of the SSO, the coordination plan through the District Coordination Cell, as experience shows, has virtually failed. The district level can act as a link between the SSO and the project level for monitoring and evaluation purposes. This would necessitate the creation of a district development cell much like the SSO at the State level, whose function would be to monitor the progress of development projects., pass on data and information to the participant agencies/departments, and feed the SSO with information on project progress. With the help of such a cell, the District Collector can take data-based decisions to make sure that on-going development projects are brought to successful fruition. The proposed cell need not be equated with the present district statistical cell which merely collects data for compilation purposes and not for project management.

At the project level, the main problem is to make the participant agencies/departments work in concert. The initial plan prepared by the SSO is expected to

indicate the respective roles of the partners in a multi-sector project. At the project level, there can be three ways of project coordination:

- (i) The agency/department having the major operating responsibility may be made in-charge of project coordination. In the case of REC project, this would mean the captaincy of the RSEB local engineer.
- of the State, such as the subdivision and the block, may be accepted as the coordination platform. This would mean, in our situation, acceptance of the coordinating role of the BDO.
- (iii) A special organisation may be set-up with a project officer incharge for the exclusive purpose of project coordination. The Project Officer (MI) at Kekri was called upon to play a very similar role.

These alternatives do not exhaust the list of possible administrative arrangements. One could even think of project coordination through the panchayati raj bodies at different levels. In our situation, the Kekri and Weir projects seem to be suggesting the first two elternatives. coordinating role of the operating department/ agency would, of course, depend very much on the managerial capacity of the local level officer of the concerned department/agency. The use of the area administrator (second alternative) seems more workable because the area level administrative arrangement of the State has a longer standing and its formal coordinating role is well known in administration. But a spatial unit, like the block set-up, will be able to perform the coordinating role at the project level provided the present tendency to weaken the block administration is arrested and steps are taken to revamp the block set-up.

The vertical line of each department/agency will continue to have their traditional importance.

Multi-level coordination is not merely a problem in

structural reorganisation of government. It also poses problems of reshaping departmental attitude.

To develop a culture of togetherness among the departments/agencies is a long-drawn out affair for which imaginative training programmes and workshops may have to be designed on a regular basis at different levels.

Last but not the least, in project formulation and implementation the farmers have nowhere been actively associated at any stage both at Yekri and Weir. They have been treated as something "given", and it has been assumed that with the introduction of new technology (electrification) the acceptance by farmers would follow automatically. To the administrators, the consumer-farmer is a 'beneficiary' and not a 'participant' in the process of development. The VLW was heard saying that propagation of the REC scheme was not their responsibility. planning stage, the wells were identified, not the farmers. Later, at the time of implementation, it was discovered that the projects needed clusters of willing farmers. To the farmers, at that stage, the project was one among many schemes which the government had been showing on the villages. The villagers are at the receiving end, their active participation is hardly ever

solicited. Structuring or institutionalization of participation has not been considered at both the places.

Public participation as resource for administration has almost gone by default at the planning and execution stages. The projects have suffered in consequence at both the sites.

one way of structuring local participation is to associate grass roots institutions (e.g. panchayats) with planning and implementation. An advisory committee consisting of consumers from the villages in each project area could be considered. Such a Committee could be tied to the "block" or the Project Engineer. The reactions and responses of the consumers to the projects could then be tapped at the project level and fed into the processes of administration.

To sum up, coordination in electrification raises important problems of vertical and horizontal relationships among and within organizations. The organizational requirements need to be handled structurally as well as behaviourally. Topular participation in project management has also to be acknowledged as crucial, and the modalities of participation need to be worked out for project success.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

In this chapter the major conclusions and recommendations of the report have been gathered together. The purpose is to put the findings at one place and give the reader an overall view of the study.

'Connections' or target fulfilment can be considered the "intermediate output", whereas "actual agricultural productivity alongwith allied results", can be called the final output. Increase in irrigated land and water quantity, growth in farm output and farmers' income, repaying schedule of loan, rise in local bank deposit are some of the crucial indices that could be adopted to measure final output.

At the field level, there are different tiers of administration such as the division or circle, the district, the subdivision and the block. Vertical co-ordination would mean working together of these tiers in so far as any one of these has relevance for a particular project. Depending on the location of operational area of a project, the different agencies

at that location having a bearing on the project have to come together in support of the common cause.

If project success would be dependent on the joint endeavour of a number of agencies, the interorganizational relationships need to be deliberately worked out both at the planning and implementation stages.

To expect that occasional committee meetings at state and district levels would solve the problem looks, however, a very simplistic reaction to a complex organizational situation. More organic changes are needed to facilitate interorganizational cooperation and collaboration at different stages of the development process.

Electrification planning with a view to improving the economy of an area is more than sectoral planning. It has to be concerted effort of a number of organizations that are relevant for area development. The inter-organizational linkages would necessarily be both horizontal and vertical. Planning, in this context, will be the endeavour of an 'organization set' whose members have to produce an area development plan through a

continuous process of interaction among themselves. The understanding that will be reached at the stage of planning would be useful for implementation also. Once the complementary roles of participating organizations would be spelt out, plan execution would not have to face organizational incompatibility.

with the help of grampanchayats and the VLW, it is possible to ascertain effective demand for pumpsets by an unitial market survey of potential consumers. This might yield more sound evidence of households really interested in getting connections. The potential consumers can then be put on the map to find out natural clusters and to lay the electricity line.

Coordination, both at planning and implementation stages, needs an organizational niche -- an appropriate level wherefrom to operate in concert and cohesion. The project (block) administration level should have been the right place for the coordination of activities of the different 'functional' and 'loaning' organizations relevant to the project.

The electrification scheme, it seems, has been conceived as an exclusive planning responsibility of the

RSFB. At the time of project formulation, aside from the ritualistic data collection to satisfy REC requirements, no other departments were actively involved in planning. The project planning thus boiled down to functional planning rather than area development planning. Only when the project was taken up for ground-level execution, the need for close understanding between the RSHB and other field organizations had suddenly become important. At the implementation stage, the field organization structure and work processes of the RSEB seem to have impeded the progress of the scheme. the project level officers of the Board, electrification is a technical job which they will undertake to do only when the farmer approaches them. At best, the MI office will do the extension work and motivate and bring the farmers to the local RSEB office. have been formulated by the Headquarters and work would be undertaken according to rules. At the base level, the farmer is left to the care of long-winding rules, and junior engineers and his entourage. When rigid rules do not fit in with the farmers' requirements, administrative aberrations overtake the rules. is what passes for 'corruption'.

The operational procedures of the departments prove to be a major hindrance to the smooth and efficient functioning of the organisations at Kekri. The formal procedures, particularly of the RSEB (REC) and the Frimary Land Development Bank are so lengthy and cumbersome that these often cause delay and harrassment to the applicants.

The lending procedure of the Primary Land Development Bank is no better than that of the RSEB. The prescribed application form of the PLDB is a four-page piece costing P. 2 per copy. The applicant is to run after the patwari of the particular village and other people in the revenue department for days together to collect 'Jamabandi' and 'Girdawari' certificates. He is also to collect 'no-due' certificates from 3 or 4 local financing agencies. Then he is to pay a series of visits with relevant documents to the Minor Irrigation project office to get his application passed by that office.

Officials, sarpanches, village level workers who were interviewed in course of research referred to a number of deeply entrenched socio-economic factors impeding the progress of the scheme. More important among these are: (1) Small and scattered plots or agricultural holdings, (2) Joint family ownership of

agricultural holdings, (3) existence of large scale indebtodness among the farmers, and (4) illiteracy among farmers who are not quite familiar with the rules and regulations relating to energisation of tube-wells with the h lp of REC scheme or any other development scheme.

Lack of plan coordination, procedural bottlenecks, administrative corruption and socio-economic forces combined together to frustrate the development efforts at Kekri.

Organizational confusion seems to have taken a heavy tell of the Kekri project, and it is here that the REC scheme has important lessons for area development projects in general in the country.

The REC scheme in Weir was launched at an opportune moment. In 1975, when it has taken up, Weir had by then a degree of electrification and the two development schemes preceding the REC scheme (SFDA & ARDC) had produced results and a development consciousness among the Weir farmers.

The role of the Special Schemes Organization deserves special mention in the context of the Weir Scheme. This state level organization has the primary responsibility of "projectising" special development schemes and it looks after the interdependencies among several schemes and

induces planned integration among complementary schemes. The RSEB had to pass through the mediation of the SSO which examined the REC scheme in the spatical context and sought to blend the scheme with the minor irrigation scheme in area. So, planned coordination was ensured through the institutional mechanism at the State level.

It seems that the Weir scheme was much more cautiously prepared. The targets were much less ambitious and these were set after taking realistic account of the field situation. Caution and initial planning had a satisfactory pay off in terms of timely target fulfilment.

The satisfactory progress of the REC scheme in Weir can be traced broadly to three sets of factors: environmental, infrastrustural and managerial.

The <u>environmental factors</u> refer to the location of the scheme area, its favourable factor endowments in terms of soil condition and water availability, and a general social-psychological climate of agricultural growth and modernisation created by successive new schemes in and around the project area.

The <u>infrastructural</u> factors basically stand for transportation network, marketing facility, and institutional framework supportive of agricultural activities.

On the organisational side, the initial technical planning was done by the RSEB, but the electrification plan

Was made into a kind of area development plan by the Special Schemes Organisation, which saw to it that the REC scheme was blended with other development schemes (ARDC, SFDA) and the flow of institutional credit was assured in support of agriculture. At the sub-state (District) level, the coordinating committees have been more ritualistic than functional. This is correborated by the field evidence of officers like the executive engineer and the block development officer. Committees seem to be serving the purpose of mechanistic coordination whereas success seems to have occurred more due to organic coordination among a number of existing and interdependent organisations and functionsries.

If mechanistic coordination would be on state fiat by creating formal forums of consultations, organic coordination would be the result of informal consultation, visits and sharing of experiences around schemes and activities that are perceived as 'common' by officers and organisations operating in the same physical space. From field visits and discussions with officers, it came to light that the role of organic coordination in area development seems much more important than mechanistic coordination.

Usually this kind of functional coordination takes place under the informal leadership of a generally accepted central person at the project level. In the REC scheme area, the role of the Project-in-charge -- the Assistant Engineer -- has been crucial from this point of view.

The responses of both Kokri and Weir farmers to the processes of electrification and supply of rural credit and agricultural input bring out some intraorganizational and inter-organizational issues. Farmers at both the places had to face many common problems such as procedural complication, corruption and nonevailability of inputs from government agencies. Yet on balance, the Weir farmers seem to have had a better deal than their Kekri brethren. Weir respondents could circumvent the procedural bottleneck to a great extent by placing reliance on contractors. The commercial banks proved much more approachable and smooth-function-Loan applications were processed in Weir with greater speed through the arrangement of local camps. On the RSEB side, despite allegations of corruption raised by respondents at both places, the Weir farmers seemed to have received ready assistance from the RSEB personnel. Especially, the local officers at Weir such

as the Assistant Engineer-in-Charge have been much more accessible as revealed from the respondents' responses. The helpful posture of the technical organisation (RSEB) matched very well with the active role of the commercial banks in Weir in quickly issuing loanable funds to willing formers. The responses of Kekri respondents do not reveal comparable situations favourable for expeditious project impl mentation. To many of them, the RSEB personnel did not appear equally helpful. The contractor's helping hand was generally unavailable, and the processes of loan getting proved much more circuitous at Kekri. Organisationally, it seems the Kekri respondents, unlike their Weir counterparts, had to face a relatively discordant organisation centred around rural electrification.

The problem of how to socialise the SEB in the culture of rural development will continue to bother the REC, and more imaginative efforts lik training programmes and workshops will have to be mounted to broaden the perspective of the engineers and bring them closer to other development departments and agencies such as the agriculture department, the banks and the cooperative.

Area development —— its meaning, methodology and

mechanics — has to be communicated to the SEB in much more systematic manner than merely through occasional circulars.

As the analysis of the two projects reveals, success depends as much on efficient management within a single organisation (.g. SEB) as on inter-organisational relationships, both vertical and horizontal.

The remedy, so far as demand estimation is concerned, lies in proper and scientific project formulation on the basis of relevant critical data which/have to be/may collected from primary sources such as interviewing farmers and house-to-house survey.

The follow-up of REC project review seems to have gone by default. Review has to be more than a formal exercise, firstly the exercise has to be timely, and the findings communicated to SEB, and then corrective action has to be enforced through a process of continuous consultation and visits. Without this, there is every likelihood of the review report being treated as a mere formality.

Other intra-organisational issues relate to timely procurement of materials, simplification of procedures

(electricity connections, for instance) and elimination of corruption among field staff. With more managerial

attention, both these problems can be solved to a large extent. Within the SEB, more delegation of authority to field/project staff can be considered.

Buresucratic hi rarchy and coordinating committee
have been the two time-tosted devices to bring about horizontal coordination. Both represent mechanistic devices
that work on the fiat of government authority. They do
not grow out of organic relationships or 'felt' needs of
participant organisations at the field level. As our
study shows, both at Kekri and Weir these usual administrative devices have been present. But their afficacy
was questioned at both places. More importantly, the way
the different organisations and agencies functionally came
together at Weir under the leadership of the local project
engineer exemplified a different form of coordination that
comes close to what can be called organic coordination. The
project success at Weir owes much to this form of coordination at the level of the project itself.

The failure of the K kri scheme, in fine, can be attributed to lack of organisational preparedness. <u>Ver-vically</u>, the scheme was directly handed over to the project level without any attempt to blend it with other allied local investment proposals. The SSO was non-existent in

these days, so it was a direct deal between the REC and the RSEB. Field level 'coordination' was mechanically conceived by creating a coordination cell at the district level under the aegis of the collector. Coordination is not a hierarchical problem; it is an organisational neces - sity at the level of actual implementation in response to conditions of interdependencies. Project level coordination did not receive the attention it deserved.

To attribute failure merely to lack of coordination will surely be a rather simplistic explanation. As discussed earlier in connection with the Weir scheme, environmental and infrastructural factors are important determinants of project success. Compared to Weir, Kekri has been less favourably endowed with these factors.

Inter-organisational coordination, both vertical and horizontal, has been better structured in the case of Weir.

Planning coordination was done at the State level by the SSO among a number of area development schemes. Before the Weir electrification project was handed over to the project level, the interdependencies were considered and inter-project linkages established.

More than vertical (multilevel) coordination, concerted action at the implementation level by a set of interdependent agencies seems very crucial for project success.

Project level coordination raises the question of how to associate the 'block' administration with project implementation.

It needs to be seriously considered how far local area level development projects could be integrated with, and not left out of the block set-up.

Besides planning coordination, the SSO would have the additional responsibility of 'briefing' the participant departments/agencies in a multi-sector project, in order that each partner understands its own separate role and its relationship with other partners. Since SSO is charged with top-level coordination, it has also to do the monitoring and evaluation. The feedback from the project level needs to be systematised and the data should be used to make corrections and necessary changes in the original project design. In view of the crucial importance of the SSO in project coordination at the planning level, the SSO may need an "inspectorial" wing to go down to the field at certain intervals and inspect project progress. At the moment, this important responsibility is going by default.

The district level can act as a link between the SSO and the project level for monitoring and evaluation purposes. This would necessitate the creation of a district development cell much like the SSO at the State level, whose

function would be to monitor the progress of development projects, pass on data and information to the participant agencies/departments, and feed the SSO with information on project progress. With the help of such a cell, the District Collector can take data-based decisions to make sure that on-going development projects are brought to successful fruition.

At the project level, there can be three ways of project coordination:

- operating responsibility may be made in-charge of project coordination.

 In the case of REC project, this would mean the captaincy of the RSEB local engineer.
- (ii) The conventional area administration of the State, such as the subdivision and the block, may be accepted as the coordination platform. This would mean, in our situation, acceptance of the coordinating role of the BDO.

(iii) A special organisation may be set-up with a project officer incharge for the exclusive nurpose of project coordination. The Project Officer (MI) at Kekri was called upon to play a very similar role.

The use of the area administrator (second alternative) seems more workable because the area level administrative arrangement of the State has a longer standing and its formal coordinating role is well known in administration. But a spatial unit, like the block set-up, will be able to perform the coordinating role at the project level provided the present tendency to weaken the block administration is arrested and steps are taken to revamp the block set-up.

Multi-level coordination is not merely a problem in structural reorganisation of government. It also poses problems of reshaping departmental attitude. To develop a culture of togetherness among the departments/agencies is a long-drawn out affair for which imaginative training programmes and workshops may have to be designed on a regular basis at different levels.

Last but not the least, in project formulation and implementation the farmers have nowhere been actively associated at any stage both at Kekri and Weir.

has almost gone by default at the planning and execution stages. The projects have suffered in consequence at both the sites.

One way of structuring local participation is to associate grass roots institutions (e.g. panchayats) with planning and implementation. An advisory committee consisting of consumers from the villages in each project area could be considered. Such a Committee could be tied to the "block" or the Project Engineer. The reactions and responses of the consumers to the projects could then be tapped at the project level and fad into the processes of administration.

APPENDICES

Case Studies

on

Corruption

AGRICUITURAL CONNECTION : A CASE STUDY (KEKRI)

A progressive small farmer (Ranjit Gokul Mina) from Mehrukhurd village applied for agricultural connection during December 1974. He has 4 acres of irrigated land. Since this land is located near a river, he never experienced shortage of water. He is already using one diesel pump set. All (adult) family members are hard-working and are very anxious to work in their lands. Thus he does not depend upon wage labour.

pump set, he also wanted to install one pump set. At that time a progressive big farmer (Khanni Dhan) was forming a group. This farmer also applied. After paying R.100/- to the J.E. and R.25/- to the line-man all the five farmers got connections in their wells. As usual the farmers had to spend for everything, including digging the pitch, transporting poles from Sowar to the field, wiring, atc. Even labour charges were paid by the farmers.

In this village the farmers were asked to use

capacitor for voltage control. An amount of R:.500/was charged from each farmer through the LDB by the
RSEB. Ranjit paid R:.500/- through the LDB. But until
now the capacitor has not been installed nor was the
money refunded to him. The result is that the farmers
have been paying interest charges to the bank.

Ranjit wanted to dispose off the dissal pump set. So he applied for another electric connection during January, 1975. This time the Junior Engineer demanded Rs. 600/- for the connection. He was ready to pay Rs. 100/-. But the J. Engineer refused to accept les than Rs. 600/-. The result was that there was delay in issuing the demand notice. He was very anxious to get electric connections in both the wells. land was already sown; watering at regular interval was very necessary. But the J. Engineer was reluctant to give connections. In desperation, Ranjit sent a petition to the collector, with copies to the Chief Minister and the RSFB Chairman. A meeting was called in the collectorate at Ajmer. The Executive Engineer (Beawar), and the Assistant Engineer (Kekri) were present. In the presence of the Collector, the Assistant Engineer agreed to give connection to the farmer. Around May 1976, Ranjit got first connection and around November, 1976, the second one.

Another interesting experience, Ranjit narrated, was in regard to the issue of demand notice. He said that the RSFB had issued the demand notice to the contractor without informing him. So he could not get the notice in time. He had already given a quotation to some other contractor, for the installation of the pump set. The motor, etc. had already been installed. Now he was forced to apply again. He had to comply with the 'rules' and apply again. Of course, he got the connection.

According to Ranjit, his own village could have more than 30 connections as against 9 at present. There are 92 wells in the village. The electricity officers and the farmers were not on the same wave length. Hence the short fall, according to him.

II

COLLAPSE OF A CLUSTER (KEKRI)

A farmer (Jay Ram Kalyan Bhujar) applied for industrial and agricultural connections in April 1975. He visited the RSEB office at Kekri and Sawar

meny times. After a long break of four months the Junior Engineer posted at Sawar visited the village. After pointing out many technical difficulties in giving connections, he finally agreed to consider Jay Ram's case, provided the latter would be prepared to pay a lump sum to him. Since Jay Ram was very anxious to get the industrial connection, he agreed to pay whatever the engineer demanded. Jay Ram actually paid Rs.1, 100/-. After receiving this amount, the engineer sanctioned connection (June, 1976). The Junior Engineer recommended one contractor who installed the motor of 15 H.P. since he did not have 7.5 or 10 H.P. motor at that time. Since Jay Ram was ignorant of the rules and regulations of current charges, he did not raise any objection. According to the RSEB rules the minimum charge would be calculated on the basis of horse power. For each horse power, a consumer was supposed to pay a minimum sum of Rs.10/-, irrespective of consumption. In this case the Jay Ram had to pay Rs. 150/- plus meter rent charges etc. every month, whether he actually used the motor or not.

Jay Ram was surprised and very much irritated when he was asked to pay Rs.200/- as meter rent charge

in the first month. In one month surprisingly he used only 40 units, for that also he was supposed to pay %.150/- plus meter rent charges. The income from the atta chakki on an average was %.100/- only. Thus every month he was incurring a loss of %.100/-.

Jay Ram was now reluctant to take agricultural connection for which he had applied earlier. He belonged to a group of five farmers. Since he dropped out, the group collapsed automatically. Now there was no connection in that village. All the farmers have gone for diesel pump sets.

He had 9 acres of irrigated land in one plot with a very big well. As a progressive farmer, he was using all modern inputs. The yield per acre from his land was appreciably high. He was the first man to apply for agricultural and industrial connections. He took the initiative in forming a group of five people.

After his sad experience with the RSEB people, he had no heart to go for agricultural connection.

Other villagers followed suit.

THE STORY OF EXTRA POLES (KFKRI)

exclusively on agriculture on his fourteen acres of irrigated land. As all his three sons and two daughters are below 13 years of age and also school-goers, he has employed a contract labour to help him in agricultural work. Sekhar read up to middle standard while his elder brother Madan Lal (42 years) has done matriculation. He has 14 acres of land of which 9 acres are irrigated.

Sekhar took the initiative to energize one of his wells, and then persuaded his brother to do so. In 1974, the two brothers applied for electricity proposing for the installation of two 5 H.P. motors. About three weeks later, a junior engineer (JEN) along with some helpers came to survey the site. After the survey the JEN told Sekhar that the extension would require 17 poles which could be given if one of the brothers would be installing a 7.5 H.P. motor instead of the proposed 5 H.P. one. Sekhar accented the suggestion and formally applied for the higher H.P. motor.

to them by the RSFB office. Both Sekher and Maden deposited the security money in due time. After about a fortnight, work for laying lines was started. But for some unknown reason, four or five days later all the people engaged in laying lines went away keeping the work incomplete. Soon after, Sekher met the JEN at Kehri and made inquiries about the work. The JEN said that there was some mistake in the measurement of the site and the extension would actually require 19 poles instead of 17. He suggested that either Sekher and his brother should share the cost of two extrapoles (one pole costing R.850/-) or they should convince one more farmer in the same locality to take connection.

Instead of paying for extra poles, Sekhar and Madan approached one of their neighbours and persuaded him to join their group. The application of the third former proposing installation of 5 H.P. motor was sent to the RSFB office. It was duly sanctioned and a demand police issued to him. Security money was deposited in due time. But, even after a month,

the construction work for laying lines was not resumed. Sekhar again met the JEN at Kekri, who told him that a new trouble had arisen. He said that to give connections to the 3 wells, as was proposed, would require 22 poles when the 'Official Rules' permitted him to sanction only 17 poles. The JEN remusted Sekhar that all the 3 amplicants should share the cost of five extra poles. But Sekhar refused to accept the proposal. When he was coming out of the electricity office, the JEN talked to him in confidence. He said that he would do all his best to give connections, provided Sekhar and the other applicants would be willing to pay him R.1,000/~. This was necessary, he said, to get approval from his senior officer.

Returning to his village, Sekhar discussed the situation with his brother and the third applicant. The third applicant refused to spend any extra money and rather proposed to withdraw. Considering that the Sowing season was on, Sekhar and Madan decided to share Dolloo/- between two of them. Few days later Sokhar himself handed over the money to the JEN. Money talks. Soon after, the construction work was resumed and the connections were given. After

two or three months, Sekhar and Madan disclosed to their friends that they had to pay R.1,000/- extra for getting 5 extra poles. To their surprise, they came to know that as per RSEB departmental rules, first 5 poles from the transformer are always given free in case of a new extension, and in their own case they were entitled to get 22 poles without any extra-charge. Sekhar went to the RSEB office at Kekri to know the truth. There he was told that the JEN had already been transferred on promotion. To others in the office it was a cock-and-bull story. Sekhar was told to go back and mind his own business:

IV

THE STORY OF INFLEXIBLE RULES AND SPEED MONEY (KEKRI)

Ramdhan is 45 years old, and head of a family of eight of which four are in agriculture. They also have a tiny industrial unit. He has 32 acres of land, of which only six acres are irrigated and double cropped.

His agricultural income was low, so Ram went for his traditional caste occupation of oil-crushing. In 1974 he applied for and got electricity connection to operate a 15 H.P. motor for an oil-crushing machine. The initial return from his oil-crushing machine was encouraging. Soon, however, he discovered that he should have some other options, as oil-crushing work was not stable throughout the year. He therefore set up an 'Atta Chakki'. He used to operate both the oil-crushing machine and the Atta-Chakki with the help of the same electrical motor.

But the situation soon turned against Ramdhan's expectation. By the middle of 1976, the village witnessed mushrooming of eleven Atta Chakkis and five oil-crushing machines. This naturally intensified competition among the tiny rural industrial establishments, resulting in fall in charges per kilo-gram of wheat and of oil-seeds. To make things worse, electricity unit charges and the minimum meter-charges started increasing considerably.

Facing such adverse situation, Ramdhan thought that there was no point in keeping the industrial units any more; he wanted to sell both the machines

along with the electrical motor, and concentrate instead on his agriculture. In March 1976, proposing installation of 8 5 H.P. motor he applied to the RSEB for an agricultural connection. In the mean time he got an offer from a farmer in a neighbouring village for his atta-chakki and oil-crushing machines. met the Assistant Engineer and the Junior Engineer at the local RSEB office. The officers told him that even if he would dispose of his machines and motors at that stage, he was to pay more than three years minimum meter-charge at the rate of Rs.1,872/- per year, since he had given a bond (court-fee stame) to keep the industrial connection for at least five years. Ramdhan's three or four subsequent visits to the RSEB office did not yield any result. It was not clear to him why he should be forced to pay for the increased minimum meter-charge, since he took the connection and gave the bond for five years in early 1974 when the charge for the same was only Rs.1,450/- per year.

As regard Ram's application for agricultural connection, the electricity officials were asking him to may for three extra noles when, according to him, none was needed. Ram was in a dilemma. He badly needed the agricultural connection; yet he

thought the issue of extra poles was a ruse. Ultimately, Ram said, he had to surrender himself to the electricity officials. The Junior Engineer assured him all help in return for at least Rs.500/-. Ramdhan had not paid the money yet, but he said, as he had no other alternative, he would pay it soon.

V

PROCEDURES AND PAPER SCHEMES (WEIR)

Parbhati Ram Sharma of Bhusawar is a progressive small farmer. He is a retired Headmaster.

After his retirement, he took to agriculture. He had less than 2 acres of land at one place and fell in the category of small farmer. He knew about the SFDA scheme, and wanted to avail of the benefit of the scheme. He went to the RSEB office at Weir and met the Assistant Engineer. He collected the application form from the RSEB office and after obtaining the land certificate from Patwari went back again to the RSEB. He could not find the Assistant Engineer in his office, so he met the Junior Engineer, who directed him to

well and curtly asked him to bring some stationery etc. along with the application. After some time, his land was inspected by the Junior Engineer who prepared an estimate of 5 poles. A demand notice was served on him with a note that he should apply for 5 H.P. motor instead of 3 H.P. or he should pay for two extra poles. Thus he had to deposit the money for 5 H.P. motor, actually however he was using 3 H.P. motor. According to rules, he was to pay a minimum charge of 5 H.P. motor. He went to the Assistant Engineer and next to the Executive Engineer. Everybody seemed very law-abiding as each said that their hands were tied, they must go by rules and regulations.

Along with the application for agricultural connection, Mr. Ram also applied for loan from the SBRJ through the BDO. Since he was a small farmer, he applied for subsidy from the SFDA scheme through the SBBJ, and lead bank in the area. After fulfilling the basic requirement he got the loan, a sum of Rs.3,600/-, through the contractor. His subsidy was duly sanctioned but he could not receive any information from the bank. He has been paying his instalments regularly. He argued that if the bank would

accept the subsidy, then he would return only R.2,700/with interest; alternatively, he would have to repay
the entire sum i.e., R.3,600/- with interest. He
personally met the bank Manager and inquired about
it but did not get any satisfactory answer. He is
still in the dark about whether or not he would actually
receive the subsidy under SFDA. He also wrote to the
SFDA that the lead bank (SBPJ) should be instructed
on the grant of subsidy; but could not get any reply.
Mr. Ram has been waiting still.

VI

THE UNHAPTY FARMERS OF VILLAGE GOTHRA (WEIR)

Nathuram wanted to have electricity connection for his field. He went to the RSEB office, purchased an application form for Rs.2/- and filled it with the help of a line-man and submitted it along with an amount of Rs.10/- as application fee. He had to attach a certificate of land from the Tehsildar as per rules, which he did. After some time, the Junior Engineer came to inspect his well. He measured the distance from the transformer to the well and prepared an

estimate. When Nathuram visited the RSEB office he was told that he should persuade atleast five other farmers in the vicinity to join him; only then he would be given connection. He was able to get 10 farmers to join him, who filled their applications and submitted these along with necessary fees and land certificates. After about a month, a combined estimate was prepared for all the ten farmers who were asked to deposit security money. This was complied with and the money was duly deposited for 5 H.F. motor. some time the demand notices were issued but none of the farmers seemed to have received the notices until the expiry of the due date. They came to know about it when they anxiously visited the RSEB office after some time. They requested the Assistant Engineer to issue new demand notices but it went unheeded. They were all asked to deposit security money again. great anger they lodged a complaint against the local engineers with the Executive Engineer, Bharatpur. But nothing happened. The reply was that they were bound by rules and the money should be deposited again as security as per rules. The Executive Engineer, however, promised that he would look into the case and see if the earlier deposit could be returned. So, the farmers had to fill up again the application forms and deposit the security money. Ultimately, they got the connections. But the sum they deposited first time was yet to be refunded. As years roll on, the prospect of getting the refund is becoming dimmer and dimmer.

VI

THE ORDEAL OF KIROLI FARMER (WEIR)

A farmer of Kiroli village who recently got agricultural connection was narrating his experience. He was persuaded by his neighbours to take electric connection. He went to the Board's office at Weir and asked for an application form. The dealing clerk refused at first but after some time he agreed to give him the form at a cost of 10.10/- while the actual cost was 10.2/- only. He tried to fill up the form on his own but could not do so, and nobody was there to help him. He looked for the Assistant Engineer, but he was not in his office. He therefore came back to his village and got the form filled up with the help of a school teacher. Then he went to the village Patwari

for the certificate. The application form was then submitted to the Assistant Engineer's office at Weir. As he approached the dealing clerk he demanded R.10/xtra for some stationary. Satisfied, the clerk now accepted the form. After about two months, the Junior Engineer, Bhusawar, visited the village to prepare an estimate for the whole group of applicants. After measuring the distance, the Junior Engineer told the farmer that either he should take connection for 5 H.P. motor or pay for the cost of two extra poles. After some discussion the engineer agreed to give connection for 3 H.P. motor on payment of one pole worth R.850/- and P.200/- extra for his services.

office. Unfortunately it did not somehow reach the former in time. On inquiry, he was told that the demand notice was duly issued; it has his fault not to have complied with it in time. He was asked, therefore, to apply again for agricultural connection. He complained in vain to the Assistant Engineer. So he had to apply again and go through all those formalities again. This time he received the demand notice

and deposited the money without any waiting. He was at last happy that he could get all the fittings etc. through the contractor. Now he was paying minimum charges for 5 H.P. motor, while he applied and deposited security alongwith the cost of a pole, for only 3 H.P. motor. He met the Assistant Engineer who was kind enough to see the file and assure him that the extra charges would soon be adjusted. Time, bowever, is no consideration for the RSEB, and the money was yet to be adjusted. Power supply in day time, especially in the months of December and January when irrigation was so necessary, was not available and the farmers were asked to work at night. Even at night, power supply was hardly ever regular. So, the farmer concluded, all that the RSEB wanted from us was money which had to be given in many forms to many people.